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ENVIRONMENTAL

Mr. Larry Rosenmann
New York State Department of Environmental Conservation
Bureau of Hazardous Waste and Radiation Management, 9th Floor
625 Broadway
Albany, NY 12233

Subject:
Supplemental Investigation Report
Solvent Dock Area
Former Lockheed Martin French Road Facility
Utica, New York

Date:
January 25, 2010

Contact:
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Our reference:
NJ000637.0001

Dear Mr. Rosenmann:

On behalf of Lockheed Martin Corporation (Lockheed Martin), ARCADIS has completed a supplemental investigation of the former Lockheed Martin French Road facility as part of the *Corrective Measures Implementation Plan* (*CMIP*) required by the New York State Department of Environmental Conservation (NYSDEC) "Order On Consent," Index Number CO 6-20080321-5 (herein, the Order). The *Corrective Measures Study Report* (*CMS Report*) (ARCADIS 2009) presented the findings of the corrective measures study conducted pursuant to the *CMIP* and recommended a corrective-measures alternative for remediation of the facility. The supplemental investigation described herein was intended to further evaluate the findings of the soil, groundwater, and soil-vapor investigation presented in the *CMS Report* associated with the Solvent Dock Area (the Site) at the French Road facility. Work was completed in accordance with the NYSDEC-approved *Work Plan for Supplemental Investigation* (ARCADIS 2009).

1.0 Site Description and History

In the early 1950s, General Electric Company (GE) acquired approximately 55 acres of undeveloped land on French Road in Utica, New York and constructed a 500,000-square-foot manufacture facility. Figure 1 presents a site location map. GE production operations included the manufacturing, assembly, and testing of electrical components for the defense and aerospace industries. GE production operations continued until April 1993, when the facility was acquired by Martin Marietta Corporation (MMC). In March 1995, MMC merged with Lockheed Corporation to form

Lockheed Martin Corporation (Lockheed Martin). In March 1996, Lockheed Martin sold the property to Pinnacle Park, Inc., which subsequently transferred the property to and leased it back from the Oneida County Industrial Development Agency (OCIDA). ConMed Corporation (ConMed), a medical supplies manufacturer and distributor, now occupies the facility under a lease with OCIDA. Although Lockheed Martin no longer owns the property, Lockheed Martin retains responsibility for environmental cleanup activities related to past releases at the Solvent Dock Area.

Groundwater in the northeast portion of the main manufacturing building (see Figure 2), an area known as the Solvent Dock Area, and in an area along the former northern-perimeter ditch has been adversely affected by volatile organic compounds (VOCs). The former Solvent Dock and immediate vicinity (referred to as the Solvent Dock Area) includes a 275-gallon fiberglass overflow-retention tank. This tank stored spent solvents as waste, which was periodically sampled, pumped from the tank, and disposed of by waste haulers. The tank was removed in June 1990, at which time the tank was observed as dented and leaking fluid. The former northern-perimeter ditch (along the northern property boundary) was an open-drainage swale that received storm-water from the area north of the manufacturing building and conveyed the water, along with storm-water from the western portion of the property, to a manhole before discharge to the municipal storm sewer.

Since 1991, GE, MMC, and Lockheed Martin have completed groundwater investigations in these areas. In November 1994, Blasland, Bouck, & Lee, Inc. (BBL) completed an investigation of the facility storm sewer in the Solvent Dock Area. The investigation determined that VOCs detected in the storm sewer were attributable to the discharge of VOC-contaminated groundwater into the northern-perimeter ditch and infiltration of VOC-contaminated groundwater from the Solvent Dock Area into the storm sewer beneath the building.

In May 1995, BBL completed a *Storm Sewer Investigation Report*, which recommended that the contaminated portion of the storm sewer flow be collected, treated, and discharged to meet proposed State Pollutant Discharge Elimination System (SPDES) VOC-effluent limitations. BBL [in accordance with NYSDEC recommendations] evaluated remedial design alternatives to address the source of VOCs entering the storm sewer that would remediate the contaminated groundwater. The results of this evaluation were presented in the *Storm Sewer Basis of Design Report* (BBL, 1995).

Based on this report, BBL completed the final design of the *French Road Facility Ground-Water Collection and Treatment System* in October 1995; construction of the system was completed in June 1996. The system collects groundwater from the Solvent Dock Area and the former northern-perimeter ditch area, conveys the collected groundwater to a treatment building where a low-profile air stripper removes the VOCs, and then discharges the treated effluent to the municipal storm-water system.

A hydraulic- and water-quality-monitoring program to evaluate the effectiveness of the Solvent Dock Area groundwater collection and treatment system (GCTS) was developed. This program, as presented in the *Ground-Water Sampling and Analysis Work Plan* (BBL, 1998), has been modified through monthly and quarterly correspondence with NYSDEC to accommodate changing conditions over the life of the project. In response to observed groundwater contamination at the Site (as described above), Lockheed Martin voluntarily installed and operated (and continues to operate) the GCTS and began an investigation of soil-vapor and indoor-air quality.

The Order identifies areas of concern (AOC), including soil and groundwater quality. Each AOC required further investigation and identification of corrective actions. Investigations into these AOC were completed as part of the CMS and presented in the *CMS Report*. However, Lockheed Martin decided that supplemental investigations into specific areas of the Site were warranted to fully characterize the extent of contamination and to confirm the effectiveness of the remedial actions recommended in the *CMS Report*.

2.0 Objective

The supplemental investigation further evaluated the findings of the soil, groundwater, and soil-vapor investigation presented in the *CMS Report*. Additionally, NYSDEC (in an April 24, 2009 letter) asked Lockheed Martin to evaluate the potential for soil-vapor migration toward the east, where an International House of Pancakes (IHOP) restaurant is located.

3.0 Summary of Completed Activities

The supplemental investigation included installation of soil borings, groundwater-monitoring locations, and soil-vapor sampling locations. Soil boring, groundwater sampling, and soil-vapor sampling locations are shown on Figures 3 and 4.

3.1 Groundwater Sampling — East Parking Lot

As part of the supplemental investigation, ARCADIS investigated the potential presence of groundwater impacts beyond the known area of contamination along the catch basin (CB) CB-1 to CB-2 storm-water line in the east parking lot. Five piezometers (PZ) were installed in the east parking lot, near the IHOP restaurant (see Figure 3):

- PZ-17 and PZ-18 were installed north of the storm-water drain line;
- PZ-19 and PZ-20 were installed south of the storm-water drain line; and,
- PZ-21 was installed east of the facility, and near the IHOP restaurant.

Each piezometer was installed using direct-push Geoprobe™ drilling techniques, which include collecting soil samples using a macro (four-foot) coring device. Because of concern for underground utilities in the area, an air knife and hand clearing were initially used at several investigatory-boring locations to advance the first five-feet of those borings. During installation, an ARCADIS scientist logged and screened the soils for the presence of VOCs using a photoionization detector (PID). Boring logs are included in Appendix A. As requested by NYSDEC (in an October 30, 2009 letter), in the event that elevated PID readings were noted during screening, a soil sample was to be collected and submitted for VOC analysis. No elevated PID readings were noted during installation of the five piezometers. As such, soil samples were not collected as part of the east parking lot investigation.

At each location, a one-inch-diameter piezometer was installed. Well construction logs are included in Appendix A. A one-inch schedule-40 PVC 0.010-inch-slot screen was installed across the water table at each location. Each individual piezometer had a five-foot screen to fully bridge the water table observed during installation, except for the screen at piezometer location PZ-21, which was installed with a 6.5-foot screen. The elevation of the top of each piezometer was surveyed to the nearest 0.01-foot, to facilitate future water-level monitoring and determination of water elevations.

Following installation, the piezometers were developed by bailing and surging to remove fine material. In general, piezometer development was continued until the discharge water was visually free of sediment. Piezometer PZ-21 (near the IHOP) did not have measurable water at the time of development (i.e., it was dry), and therefore could not be developed.

On November 30, 2009 (approximately five days after development), groundwater samples were collected from the newly installed piezometers using standard purge and bail techniques. ARCADIS purged up to three well volumes before sampling, if the yield was sufficient. Piezometer PZ-21 remained dry at the time of sampling, and therefore was not sampled. Groundwater samples were submitted to TestAmerica Laboratories of Amherst, New York for chemical analysis of VOCs, with an expedited (five day) turnaround time.

3.2 Groundwater Sampling — Former Northern-Perimeter Ditch

Sampling locations near the former northern drainage-ditch were designed to further investigate groundwater contamination in the area of the former ditch. Six test borings were completed near the former ditch (as shown in Figure 4). Per the work plan, permanent piezometers were not installed at these six locations. Rather, groundwater samples were collected directly from the open borehole (temporary sampling locations). Other field and analytical methods for this work were equivalent to that performed for the east parking lot described above. Groundwater sampling locations are identified with the prefix “GW.”

Between November, 16-19, 2009, groundwater samples were collected from the open boreholes using standard purge-and-bail techniques. ARCADIS purged up to three borehole-volumes before sampling, if the yield was sufficient. Groundwater samples were submitted to TestAmerica Laboratories of Amherst, New York for chemical analysis of VOCs, with an expedited (five day) turnaround time. At the completion of sampling, the soil borings were tremie-grouted to the surface with cement-bentonite grout.

During installation of GW-6, an elevated PID reading was noted in soils at approximately 12-feet below ground surface (bgs) (PID reading of 36.2 parts per million by volume (ppmv)). Consistent with NYSDEC’s request, a soil sample was collected at this interval and submitted for analysis of VOCs. This was the only collected sample submitted for laboratory analysis, per the work plan, as part of the former northern perimeter ditch activities.

3.3 Soil-Vapor Probe Installation and Sampling

As requested by NYSDEC in its April 24, 2009 letter (which approved the *CMS Report*, with conditions), the potential for off-site migration of soil vapor, specifically toward the east and the IHOP restaurant was investigated. ARCADIS oversaw the installation of three permanent soil-vapor probes (SG) east of the manufacturing

building. Two of these were installed in the east parking lot along the facility boundary (locations SG-3 and SG-4, as shown on Figure 3). A third permanent soil-vapor probe was installed near the IHOP restaurant near the storm-water line (location SG-5, also shown on Figure 3). Although five permanent soil-vapor probes were proposed for installation in the *Work Plan for Supplemental Investigation* (ARCADIS 2009) two probes (SG-1 and SG-2) were not installed due to the presence of saturated soils immediately below the asphalt cover that continued to a depth of approximately seven feet below ground surface (the presumed depth to the water table). These saturated soils are assumed to be related to poor drainage conditions that retain storm water in the shallow soils below the parking lot.

Additionally, NYSDEC had requested (in its October 30, 2009 letter) that a sixth soil-vapor probe (SG-6) be installed at the southwest corner of the IHOP restaurant to further evaluate the potential of soil-gas migration into the building. An attempt at locating an acceptable area to install this soil-vapor probe was, however, unsuccessful, due to the presence of subsurface utilities (including storm sewer, electric, gas, and an oil-water separator associated with the restaurant operations). NYSDEC was informed of these conditions during the field investigation.

Soil-vapor probes were installed and completed in accordance with New York State (NYS) Department of Health (NYSDOH) guidance (*Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, 2006). Each soil-vapor probe was installed to a depth not greater than one foot above the water table at each location. Following installation of the soil-vapor probes and in advance of soil-vapor sampling, helium tracer-gas testing was completed at each location to confirm that the samples would not be diluted by ambient air. This testing, completed in accordance with NYSDOH guidance, confirmed the integrity of each of the three sampling locations. Soil-vapor probe logs are included in Appendix A.

On December 1, 2009, ARCADIS sampled each soil-vapor probe, with the exception of soil-vapor probe SG-5 (near the IHOP restaurant). The probe at this location was observed to contain water, thus precluding sample collection. This sampling location is in a landscaped, grassy island northwest of the IHOP restaurant. The presence of water in the soil-vapor probe (not initially noted during installation) is likely due to poor drainage through shallow soils as a result of precipitation (rain and snow) and snowmelt.

Soil-vapor samples were collected as two-hour grab samples, submitted to Centek Laboratories of East Syracuse, and analyzed for VOCs by U.S. Environmental

Protection Agency (USEPA) “Method TO-15”. One ambient (outdoor) air sample was collected in the east parking lot, at a point approximately equidistant between soil-vapor probes SG-3 and SG-4. This location was chosen as an area representative of ambient air quality for the investigation.

Following completion of soil-vapor sampling, ARCADIS notified NYSDEC and NYSDOH of the conditions within soil-vapor probe SG-5. Considering that PZ-21 was dry (lack of measurable groundwater, as presented in section 3.1 above), ARCADIS recommended that a soil-vapor sample be collected from PZ-21 as a potential replacement to soil-vapor probe SG-5. Per NYSDOH’s December 14, 2009 email to ARCADIS, its acceptance of the soil-vapor sample results would be based on ARCADIS’ justification of the integrity and representativeness of the sample. ARCADIS’ justification is as follows:

> *On December 18, 2009, ARCADIS collected a soil-vapor sample from piezometer PZ-21. Initially, a ¼”-outer-diameter (OD) inert tube was placed into the piezometer to a depth equal to the midpoint of the screened interval (at approximately the midpoint of the screened interval, i.e., 3 to 9.5-feet below ground surface). Moldable clay was then used to seal the top of the piezometer around the tubing. Following installation, a helium tracer-gas test was completed at piezometer PZ-21 to confirm that the planned sample would not be diluted by ambient air. The testing was completed in accordance with NYSDOH guidance, which confirmed the integrity of the piezometer for soil-vapor sampling. ARCADIS then purged three air volumes from the piezometer (approximately 4,390 milliliters of air at a rate of approximately 100 milliliters per minute) prior to sampling. Following purging, a two-hour grab sample was collected and submitted to Centek Laboratories of East Syracuse, and analyzed for VOCs by USEPA Method TO-15. Based on the successful results of the tracer-gas testing and the volume of air purged prior to sampling, the technique described above (consistent with that completed at other Site soil-vapor probes) was successful in collecting a representative soil-vapor sample for the PZ-21 area. As such, it is ARCADIS’ position that the data from the sampling can be considered appropriate as a screening tool for the presence or absence of impacts to soil-vapor near the IHOP restaurant.*

One ambient (outdoor) air sample was collected immediately adjacent to PZ-21 (approximately 15-feet northwest). A second inspection was also made at soil-vapor probe SG-5 at the time of soil-vapor sampling at PZ-21. This inspection confirmed

the continued presence of water at SG-5. Similar to the first sampling attempt, sampling was therefore not completed at SG-5.

3.4 Quality Assurance/Quality Control

Complete analytical results from the groundwater, soil, and soil-vapor sampling events are provided in Appendix B. Data packages were provided by the laboratory and prepared as NYS "Analytical Services Protocol" (ASP) "Category B" deliverables. *Data-Usability Summary Reports* (included as Appendix C) were completed in accordance with NYSDEC Draft DER-10 (*Technical Guidance for Site Investigation and Remediation* (December 2002)).

The project data-validator reviewed the usability of the analytical data, including determining if the data were accurate, precise, representative, complete, and comparable. Valid data are data for which all quality assurance/quality control (QA/QC) review criteria have been met and are acceptable. Data were characterized as usable where QA/QC parameters were marginally outside acceptable limits (e.g., sample holding-times were slightly exceeded), such that the data may be questionable, but still usable within limitations. Unusable data are data that are observed to have gross errors or analytical interference that would render the data invalid for any purpose. All data reviewed are considered usable based on validation as described above.

4.0 Results

4.1 Soil

The sole soil sample was collected during the supplemental investigation from groundwater sampling location GW-6 (11 to 12 feet bgs). The results of that sample are provided on Table 1.

Detectable concentrations of VOCs, including 2-butanone, ethylbenzene, tetrachloroethene, toluene, total xylenes, and trichloroethene, were noted in the soil sample from GW-6. Each of these concentrations, however, was less than the NYSDEC Part 375 "Restricted Use-Industrial Soil Cleanup Objectives."

4.2 Groundwater

4.2.1 Former Northern-Perimeter Ditch

Results from the groundwater samples collected from temporary soil borings along the former northern-perimeter ditch are provided in Table 2. In general, each of the groundwater sampling locations, except for sampling location GW-4, exhibited concentrations of one or more VOCs in excess of NYSDEC standards and guidance values (SGVs). The following constituents were detected in one or more sampling locations at concentrations greater than SGVs: 1,1-dichloroethane, 1,2-dichlorobenzene, 1,2-dichloroethene (total), chloroethane, cis-1,2-dichloroethene, tetrachloroethene, toluene, total xylenes, trichloroethene, and vinyl chloride.

These samples were collected along the extent of the former northern perimeter ditch, and, as such, indicate the presence of impacted groundwater along the length of the area investigated. Additionally, impacts to soil (as described in section 4.1 above) indicate the potential presence of residual-source material in this area. Further investigation (as proposed below) will continue to evaluate groundwater quality near the former northern-perimeter ditch and the potential for one or more residual sources of contamination along the northern Site boundary.

4.2.2 East Parking Lot

Groundwater samples collected from the piezometers in the eastern parking lot (including PZ-17, PZ-18, PZ-19, and PZ-20) did not exhibit VOCs at concentrations greater than NYSDEC SGVs. Sampling results are provided in Table 3.

4.2.3 Soil-Vapor

Results of the soil-vapor sampling are provided in Table 4, including a comparison to screening values. As shown in Table 4, although detectable concentrations of several VOCs are present in soil-vapor at the locations sampled, no constituents exceed screening values. Detectable concentrations generally are present at concentrations orders-of-magnitude less than the screening values.

5.0 Conclusions and Recommendations

Based on the data collected as part of the supplemental investigation, ARCADIS concludes and recommends that:

- Groundwater quality in the east parking lot is not impacted by VOCs beyond the limited areas defined within the *CMS Report*;
- Soil vapor does not appear to be migrating eastward from the Solvent Dock Area toward the IHOP restaurant;
- Groundwater near the former northern-perimeter ditch was confirmed to be impacted by VOCs at locations between the western extent of the maintenance building (near GW-1) and the termination of the former northern-perimeter ditch underdrain (manhole MH-1); and,
- Limited soil sampling indicates the presence of VOCs in soils in one sampled location at the former northern-perimeter ditch.

Data from the supplemental investigation indicate that additional investigation is required, focusing on three components:

1. Additional groundwater and soil sampling along the former northern-perimeter ditch.
2. Additional soil-vapor sampling near the former northern-perimeter ditch to confirm that soil-vapor is not migrating off-site.
3. Monitoring groundwater elevations near the former northern-perimeter ditch to confirm that the existing GCTS is capturing impacted groundwater.

Lockheed Martin will develop a work plan for continued investigations and submit it to NYSDEC and NYSDOH for review and approval. In the interim, should you have any questions regarding this report or future planned activities, do not hesitate to contact the undersigned.

Sincerely,

ARCADIS

Jeffrey J. Bonsteel
Project Scientist

Christopher J. Motta, C.P.G.
Project Manager

Attachments:

Table 1 - Volatile Organic Compounds in Soil, Former Northern Perimeter Ditch

Table 2 - Volatile Organic Compounds in Groundwater Samples, Former Northern Perimeter Ditch

Table 3 - Volatile Organic Compounds in Groundwater Samples, Eastern Parking Lot

Table 4 - Soil Gas and Ambient Air Data and Comparison to Screening Values

Figure 1 - Site Location

Figure 2 – Facility Map

Figure 3 - Piezometer and Soil Gas Locations

Figure 4 - Groundwater Sample Locations – Former Northern Perimeter Ditch

Appendix A - Soil Boring, Well Construction, and Soil-Vapor Probe Construction Logs

Appendix B - Laboratory Analytical Data

Appendix C - Data Usability Summary Reports

Copies:

Mr. Gregory A. Rys, NYSDOH Herkimer
Mr. Charles Trione, Lockheed Martin
Mr. James Zigmont, CDM
Ms. Kay Armstrong, Armstrong & Associates
Mr. Jeffrey J. Bonsteel, ARCADIS

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Tables

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Table 1. Volatile Organic Compounds in Soil, Former Northern Perimeter Ditch, Supplemental Investigation Report, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York

CONSTITUENT	NYSDEC STANDARDS	GW-6 (11-12') 11/18/2009
1,1,1-TRICHLOROETHANE	1,000,000	< 130
1,1,2,2-TETRACHLOROETHANE	NS	< 130
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	NS	< 130
1,1,2-TRICHLOROETHANE	NS	< 130
1,1-DICHLOROETHANE	480,000	< 130
1,1-DICHLOROETHENE	1,000,000	< 130
1,2,4-TRICHLOROBENZENE	NS	< 130
1,2-DIBROMO-3-CHLOROPROPANE	NS	< 130
1,2-DIBROMOETHANE	NS	< 130
1,2-DICHLOROBENZENE	1,000,000	< 130
1,2-DICHLOROETHANE	60,000	< 130
1,2-DICHLOROPROPANE	NS	< 130
1,3-DICHLOROBENZENE	560,000	< 130 J
1,4-DICHLOROBENZENE	250,000	< 130
2-BUTANONE	1,000,000	510 J
2-HEXANONE	NS	< 670
4-METHYL-2-PENTANONE	NS	< 670
ACETONE	1,000,000	< 670
BENZENE	89,000	< 130
BROMODICHLOROMETHANE	NS	< 130
BROMOFORM	NS	< 130 J
BROMOMETHANE	NS	< 130
CARBON DISULFIDE	NS	< 130
CARBON TETRACHLORIDE	44,000	< 130
CHLOROBENZENE	1,000,000	< 130
CHLOROETHANE	NS	< 130
CHLOROFORM	700,000	< 130
CHLOROMETHANE	NS	< 130
CIS-1,2-DICHLOROETHENE	1,000,000	< 130
CIS-1,3-DICHLOROPROPENE	NS	< 130
CYCLOHEXANE	NS	< 130
DIBROMOCHLOROMETHANE	NS	< 130
DICHLORODIFLUOROMETHANE	NS	< 130
ETHYLBENZENE	780,000	4,200
ISOPROPYLBENZENE	NS	< 130
METHYL ACETATE	NS	< 130
METHYL-T-BUTYL ETHER (MTBE)	1,000,000	< 130
METHYLCYCLOHEXANE	NS	< 130
METHYLENE CHLORIDE	1,000,000	< 130
STYRENE (MONOMER)	NS	< 130
TETRACHLOROETHENE	300,000	290,000 D
TOLUENE	1,000,000	10,000
XYLENE (TOTAL)	1,000,000	15,000
TRANS-1,2-DICHLOROETHENE	1,000,000	< 130
TRANS-1,3-DICHLOROPROPENE	NS	< 130
TRICHLOROETHENE	400,000	3,100
TRICHLOROFLUOROMETHANE	NS	< 130
VINYL CHLORIDE	27,000	< 270

Notes:
All units are ug/kg unless otherwise noted
Data compared to 6 NYCRR Part 375 Restricted Use - Industrial Soil Cleanup Objectives
NS - No Standard
D - Diluted Result
J - Estimated Value
Exceedences noted in **bold** and shaded.

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Table 2. Volatile Organic Compounds in Groundwater Samples, Former Northern Perimeter Ditch, Supplemental Investigation Report, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	GW-1 11/16/2009	GW-2 11/17/2009	GW-3 11/17/2009	GW-4 11/17/2009	GW-5 11/19/2009	GW-6 11/18/2009
1,1,1-TRICHLOROETHANE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
1,1,2,2-TETRACHLOROETHANE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
1,1,2-TRICHLOROTRIFLUOROETHANE	5	< 1 J	< 1	< 1	< 1	3.5	< 1
1,1,2-TRICHLOROETHANE	1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,1-DICHLOROETHANE	5	4 J	< 1	< 1	< 1	**450 D**	0.80 J
1,1-DICHLOROETHENE	0.7	0.6 J	< 1	< 1	< 1	2.2	< 1
1,2,4-TRICHLOROBENZENE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPANE	0.04	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2-DIBROMOETHANE	NS	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROBENZENE	3	< 1 J	**14**	< 1	< 1	< 1	< 1
1,2-DICHLOROETHANE	0.6	< 1 J	< 1	< 1	< 1	< 1	< 1
1,2-DICHLOROETHENE (TOTAL)	5	**320 DJ**	**76**	0.82 J	< 2	**100**	4.7
1,2-DICHLOROPROPANE	1	< 1 J	< 1	< 1	< 1	< 1	< 1
1,3-DICHLOROBENZENE	3	< 1 J	< 1	< 1	< 1	< 1	< 1
1,4-DICHLOROBENZENE	3	< 1 J	< 1	< 1	< 1	< 1	< 1
2-BUTANONE	50	< 5 J	< 5	< 5	< 5	< 5	< 5
2-HEXANONE	50	< 5 J	< 5	< 5	< 5	< 5	< 5
4-METHYL-2-PENTANONE	NS	< 5 J	< 5	< 5	< 5	< 5	< 5
ACETONE	50	18 J	26	12	5	6.1	< 5
BENZENE	1	< 1 J	< 1	< 1	< 1	< 1	< 1
BROMODICHLOROMETHANE	50	< 1 J	< 1	< 1	< 1	< 1	< 1
BROMOFORM	50	< 1 J	< 1	< 1 J	< 1	< 1 J	< 1 J
BROMOMETHANE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
CARBON DISULFIDE	NS	< 1 J	< 1	< 1	< 1	< 1	< 1
CARBON TETRACHLORIDE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
CHLOROBENZENE	5	< 1 J	2.8	< 1	< 1	< 1	< 1
CHLOROETHANE	5	< 1 J	< 1	**170 D**	< 1	**130 D**	< 1
CHLOROFORM	7	< 1 J	< 1	< 1	< 1	< 1	< 1
CHLOROMETHANE	NS	< 1 J	< 1	< 1	< 1	< 1	< 1
CIS-1,2-DICHLOROETHENE	5	**320 DJ**	**74**	< 1 J	< 1	**100**	4.7
CIS-1,3-DICHLOROPROPENE	0.4	< 1 J	< 1	< 1	< 1	< 1	< 1
CYCLOHEXANE	NS	< 1 J	< 1	< 1	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
DICHLORODIFLUOROMETHANE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
ETHYLBENZENE	5	< 1 J	< 1	< 1	< 1	< 1	1.9
ISOPROPYLBENZENE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
METHYL ACETATE	NS	< 1 J	< 1	< 1	< 1	< 1	< 1
METHYL-T-BUTYL ETHER (MTBE)	NS	< 1 J	< 1	0.73 J	< 1	< 1	< 1
METHYLCYCLOHEXANE	NS	< 1 J	< 1	< 1	< 1	< 1	< 1
METHYLENE CHLORIDE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
STYRENE (MONOMER)	5	< 1 J	< 1	< 1	< 1	< 1	< 1
TETRACHLOROETHENE	5	< 1 J	< 1	< 1	< 1	1.5	**620 D**
TOLUENE	5	< 1 J	< 1	< 1	< 1	< 1	**46**
XYLENE (TOTAL)	5	< 2 J	< 2	< 2	< 2	< 1	**5.2**
TRANS-1,2-DICHLOROETHENE	5	4.8 J	2.1	< 1	< 1	< 1	< 1
TRANS-1,3-DICHLOROPROPENE	0.4	< 1 J	< 1	< 1	< 1	< 1	< 1
TRICHLOROETHENE	5	3.2 J	1.1	< 1	< 1	**47**	**27**
TRICHLOROFLUOROMETHANE	5	< 1 J	< 1	< 1	< 1	< 1	< 1
VINYL ACETATE	NS	< 5 J	< 5	< 5	< 5	< 5	< 5
VINYL CHLORIDE	2	**94 J**	**17**	< 1	< 1	**22**	< 1

Notes:
Data compared to TOGS 1.1.1 Ambient
Water Quality Standards and Guidance Values
NS - No Standard
All units are ug/L unless otherwise noted
Exceedences noted in **bold** and shaded.
J - Estimated Value
D - Diluted result

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Table 3. Volatile Organic Compounds in Groundwater Samples, Eastern Parking Lot, Supplemental Investigation Report, Solvent Dock Area, Former Lockheed Martin French Road Facility, Utica, New York

CONSTITUENT	NYSDEC GW STANDARDS	PZ-17 11/30/2009	PZ-18 11/30/2009	PZ-19 11/30/2009	PZ-20 11/30/2009
1,1,1-TRICHLOROETHANE	5	< 5	< 1	< 1	< 1
1,1,2,2-TETRACHLOROETHANE	5	< 5	< 1	< 1	< 1
1,1,2-TRICHLOROTRIFLUOROETHANE	5	< 5	< 1	< 1	< 1
1,1,2-TRICHLOROETHANE	1	< 5	< 1	< 1	< 1
1,1-DICHLOROETHANE	5	< 5	< 1	< 1	< 1
1,1-DICHLOROETHENE	0.7	< 5	< 1	< 1	< 1
1,2,4-TRICHLOROBENZENE	5	< 5	< 1	< 1	< 1
1,2-DIBROMO-3-CHLOROPROPANE	0.04	< 5	< 1	< 1	< 1
1,2-DIBROMOETHANE	NS	< 5	< 1	< 1	< 1
1,2-DICHLOROBENZENE	3	< 5	< 1	< 1	< 1
1,2-DICHLOROETHANE	0.6	< 5	< 1	< 1	< 1
1,2-DICHLOROETHENE (TOTAL)	5	< 5	< 1	< 1	< 1
1,2-DICHLOROPROPANE	1	< 5	< 1	< 1	< 1
1,3-DICHLOROBENZENE	3	< 5	< 1	< 1	< 1
1,4-DICHLOROBENZENE	3	< 5	< 1	< 1	< 1
2-BUTANONE	50	< 25	< 5	< 5	< 5
2-HEXANONE	50	< 25	< 5	< 5	< 5
4-METHYL-2-PENTANONE	NS	< 25	< 5	< 5	< 5
ACETONE	50	< 25	2.2 J	3.7 J	< 5
BENZENE	1	< 5	< 1	< 1	< 1
BROMODICHLOROMETHANE	50	< 5 J	< 1 J	< 1 J	< 1 J
BROMOFORM	50	< 5	< 1	< 1	< 1
BROMOMETHANE	5	< 5 J	< 1 J	< 1 J	< 1 J
CARBON DISULFIDE	NS	< 5	< 1	< 1	< 1
CARBON TETRACHLORIDE	5	< 5	< 1	< 1	< 1
CHLOROBENZENE	5	< 5	< 1	< 1	< 1
CHLOROETHANE	5	< 5	< 1	< 1	< 1
CHLOROFORM	7	< 5	< 1	< 1	< 1
CHLOROMETHANE	NS	< 5	< 1	< 1	< 1
CIS-1,2-DICHLOROETHENE	5	< 5	0.82 J	< 1	< 1
CIS-1,3-DICHLOROPROPENE	0.4	< 5	< 1	< 1	< 1
CYCLOHEXANE	NS	< 5	< 1	< 1	< 1
DIBROMOCHLOROMETHANE	5	< 5	< 1	< 1	< 1
DICHLORODIFLUOROMETHANE	5	< 5	< 1	< 1	< 1
ETHYLBENZENE	5	< 5	< 1	< 1	< 1
ISOPROPYLBENZENE	5	< 5	< 1	< 1	< 1
METHYL ACETATE	NS	< 5	< 1	< 1	< 1
METHYL-T-BUTYL ETHER (MTBE)	NS	< 5	< 1	< 1	< 1
METHYLCYCLOHEXANE	NS	< 5	< 1	< 1	< 1
METHYLENE CHLORIDE	5	< 5	< 1	< 1	< 1
STYRENE (MONOMER)	5	< 5	< 1	< 1	< 1
TETRACHLOROETHENE	5	< 5	< 1	0.59 J	< 1
TOLUENE	5	< 5	< 1	< 1	< 1
XYLENE (TOTAL)	5	< 10	< 2	< 2	< 2
TRANS-1,2-DICHLOROETHENE	5	< 5	0.83 J	< 1	< 1
TRANS-1,3-DICHLOROPROPENE	0.4	< 5	< 1	< 1	< 1
TRICHLOROETHENE	5	< 5	< 1	< 1	< 1
TRICHLOROFLUOROMETHANE	5	< 5	< 1	< 1	< 1
VINYL ACETATE	NS	< 5	< 1	< 1	< 1
VINYL CHLORIDE	2	< 5	< 1	< 1	< 1

Notes:
Data compared to TOGS 1.1.1 Ambient
Water Quality Standards and Guidance Values
NS - No Standard
All units are ug/L unless otherwise noted
Exceedences noted in **bold** and shaded.
J - Estimated Value
D - Diluted result

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Table 4. Soil Gas and Ambient Air Data and Comparison to Screening Values, Supplemental Investigation Report, Solvent Dock Area, Former Lockheed Martin Facility, Utica, New York

Location ID:		USEPA Target	Ambient-2	Ambient-3	PZ-21	SG-3	SG-4
Sample Depth(Feet):		Deep Soil Gas	NA	NA	5.3	5 - 5.5	6 - 6.5
Date Collected:		(> 5' bgs)	12/01/09	12/18/09	12/18/09	12/01/09	12/01/09
Lab Sample ID:	Units		C0912007-001A	C0912043-001A	C0912043-002A	C0912007-002A	C0912007-003A
Volatile Organics							
1,1,1-Trichloroethane	ug/m3	220,000	0.83 U	0.83 U	**3.4 J**	**19**	**0.83**
1,1,2,2-Tetrachloroethane	ug/m3	4.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	ug/m3	3,000,000	1.2 UJ	1.2 UJ	**1.2 J**	**1.6 J**	**9.5 J**
1,1,2-Trichloroethane	ug/m3	15	0.83 U	0.83 U	0.83 U	0.83 U	0.83 U
1,1-Dichloroethane	ug/m3	50,000	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,1-Dichloroethene	ug/m3	20,000	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,2,4-Trichlorobenzene	ug/m3	20,000	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,2,4-Trimethylbenzene	ug/m3	600	**1.2**	0.75 U	**13 J**	**3.0**	**1.9**
1,2-Dibromoethane	ug/m3	1.1	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114	ug/m3	--	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,2-Dichlorobenzene	ug/m3	20,000	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,2-Dichloroethane	ug/m3	9.4	0.62 U	0.62 U	0.62 U	0.62 U	0.62 U
1,2-Dichloropropane	ug/m3	400	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
1,3,5-Trimethylbenzene	ug/m3	600	0.75 U	0.75 U	**2.1 J**	**0.65 J**	0.75 U
1,3-Butadiene	ug/m3	0.9	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
1,3-Dichlorobenzene	ug/m3	11,000	0.92 U	0.92 U	**2.4 J**	0.92 U	0.92 U
1,4-Dichlorobenzene	ug/m3	80,000	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,4-Dioxane	ug/m3	--	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
2,2,4-Trimethylpentane	ug/m3	--	0.71 U	0.71 U	**1.7 J**	0.71 U	0.71 U
2-Butanone (methyl ethyl ketone)	ug/m3	100,000	**0.45 J**	0.90 U	0.90 U	**0.51 J**	0.90 U
2-Hexanone (methyl butly ketone)	ug/m3	--	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
3-Chloropropene (allyl chloride)	ug/m3	--	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U
4-Ethyltoluene	ug/m3	--	0.75 U	0.75 U	**3.7 J**	**1.2**	**0.60 J**
4-Methyl-2-pentanone (MIBK)	ug/m3	8,000	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Acetone	ug/m3	35,000	**9.0**	**6.0**	**3.9**	**16**	**20**
Benzene	ug/m3	31	**0.65**	**0.62**	**4.7 J**	**0.39 J**	0.49 U
Benzyl Chloride	ug/m3	5.0	0.88 U	0.88 U	0.88 U	0.88 U	0.88 U
Bromodichloromethane	ug/m3	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/m3	220	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Bromomethane	ug/m3	500	0.59 U	0.59 U	0.59 U	0.59 U	0.59 U
Carbon Disulfide	ug/m3	70,000	0.47 U	0.47 UJ	**1.6 J**	**1.7**	**0.66**
Carbon Tetrachloride	ug/m3	16	0.96 U	**0.45**	0.96 U	0.96 U	0.96 U
Chlorobenzene	ug/m3	6,000	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Chloroethane	ug/m3	1,000,000	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Chloroform	ug/m3	11	0.74 U	0.74 U	**8.5**	0.74 U	0.74 U
Chloromethane	ug/m3	240	**0.63**	**0.57**	**0.27 J**	0.31 U	0.31 U
cis-1,2-Dichloroethene	ug/m3	3,500	**3.4**	0.60 U	0.60 U	0.60 U	0.60 U
cis-1,3-Dichloropropene	ug/m3	61 (a)	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Cyclohexane	ug/m3	--	0.52 U	0.52 U	**4.3 J**	0.52 U	0.52 U
Dibromochloromethane	ug/m3	10	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
Dichlorodifluoromethane (Freon 12)	ug/m3	20,000	**2.1**	**1.9**	**1.7**	**2.1**	**2.1**
Ethyl acetate	ug/m3	320,000	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
Ethylbenzene	ug/m3	220	0.66 U	0.66 U	**6.0 J**	**0.97**	0.66 U
Heptane	ug/m3	--	**0.62**	0.62 U	**3.7 J**	**0.75**	0.62 U
Hexachlorobutadiene	ug/m3	11	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
Isopropyl alcohol	ug/m3	--	**3.7**	**0.70**	**10**	**1.3**	**4.9**
m&p-Xylene	ug/m3	700,000	**0.93 J**	1.3 U	**12 J**	**3.1**	**1.1 J**
Methyl tert-butyl ether	ug/m3	300,000	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Methylene Chloride	ug/m3	60 (b)	**1.5**	0.53 UJ	0.53 UJ	0.53 U	**1.7**
n-Hexane	ug/m3	20,000	0.54 U	0.54 U	**6.1**	**0.50 J**	0.54 U
o-Xylene	ug/m3	700,000	0.66 U	0.66 U	**7.4 J**	**0.97**	0.66 U
Propylene	ug/m3	--	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Styrene	ug/m3	100,000	0.65 U	0.65 U	0.65 U	0.65 U	0.65 U
Tetrachloroethene	ug/m3	100 (b)	**1.4**	1.0 U	**3.1 J**	**5.4**	**1.4**
Tetrahydrofuran	ug/m3	--	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
Toluene	ug/m3	40,000	**1.5**	**0.69**	**21 J**	**2.2**	**0.84**
trans-1,2-Dichloroethene	ug/m3	7,000	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
trans-1,3-Dichloropropene	ug/m3	61 (a)	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Trichloroethene	ug/m3	5 (b)	**8.6**	0.22 U	**3.0 J**	**2.1**	0.82 U
Trichlorofluoromethane (Freon 11)	ug/m3	70,000	**1.2**	**0.91**	**0.63 J**	**0.97**	**0.86**
Vinyl Acetate	ug/m3	20,000	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U
Vinyl Bromide	ug/m3	--	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Vinyl Chloride	ug/m3	28	0.39 U	0.10 U	0.39 U	0.39 U	0.39 U

Notes:
$\mu g/m^3$ - Micrograms per cubic meter
USEPA - United States Environmental Protection Agency
SG - Soil gas
PZ - Sample collected from a dry piezometer well
(a) - 1,3-Dichloropropene used as a surrogate
(b) NYSDOH indoor air screening value
-- - Value not available
U - Constituent not detected
J - Esitmated concentration
NA - Not applicable
Bold indicates a detection

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Figures

CITY:(MAHWAH) DIV/GROUP:(ENRI- 1) DB:(JG LD:(Opt) PIC:(Opt) PM:(CM) TM:(BM) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Mahwah\ACT\NJ00100000\0001\00003\2010-01\FIG 1 SITE-LOCATION-Work Plan.dwg LAYOUT: 1 SAVED: 1/4/2010 4:26 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ----PLOTSTYLETABLE: ----PLOTTED: 1/4/2010 4:26 PM BY: GONZALEZ, JAMES
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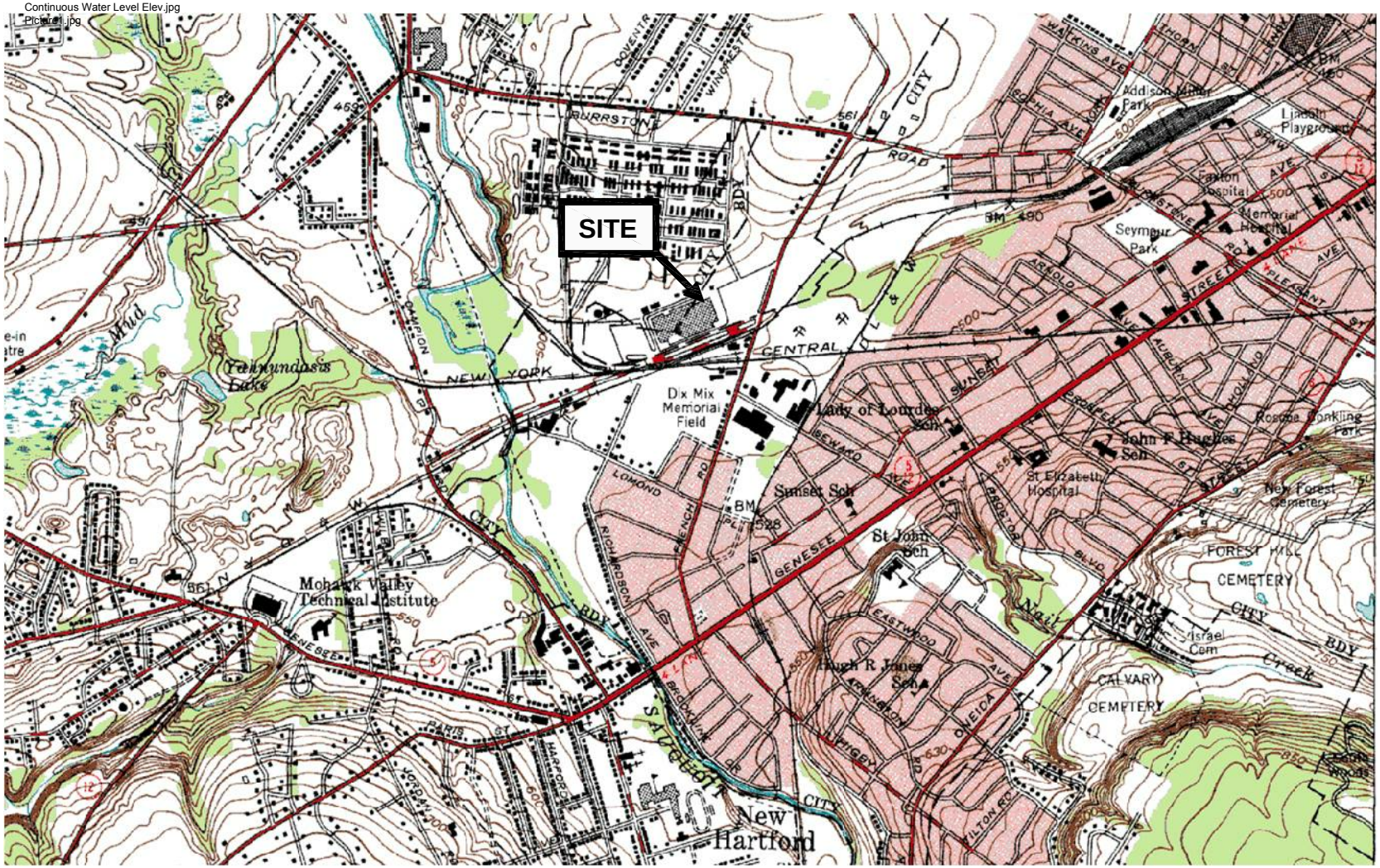

SUPPLEMENTAL INVESTIGATION REPORT

FORMER LOCKHEED MARTIN, FRENCH ROAD PROPERTY
UTICA, NEW YORK

SITE LOCATION MAP

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FIGURE
1

WATER TANK

SUB STATION

BOILER HOUSE

TANK BLDG

GROUNDWATER UNDER DRAIN

MAINT BLDG

STORAGE BLDG

STORAGE BLDG

CB-3

MH-7A

MH-7

MH-1

GROUND WATER TREATMENT BUILDING

FORMER GUARD HOUSE

FORMER

275-G OVERFLOW RETENTION TANK

WASTE WATER TREATMENT BLDG

GROUNDWATER UNDER DRAIN

FORMER SOLVENT STORAGE BLDG

MH-2

42"

FORMER HAZARDOUS WASTE STORAGE BLDG

SOLVENT TANKS (1951 DRAWING)

CB-2

PAVED PARKING AREA

PAVED PARKING AREA

MAIN MANUFACTURING BUILDING

48"

36"

12"

12"

MH-3

6"

MH-4

15"

48"

6"

12"

MH-5

6"

48"

12"

MH-6

12"

48"

24"

M-9

CHENANGO ROAD

NYS Grid

0 60 120 180

SCALE IN FEET

LEGEND:

STORM SEWER LINE

FENCE LINE

MH-2 MAN HOLE

SUPPLEMENTAL INVESTIGATION REPORT
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

FACILITY MAP

ARCADIS

FIGURE
2

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(On)(On*-OFF*-REF*
G:\ENV\2-CDM\all\wall\ACTIVE\00150000\0001000003\2016\16 FIG 2-FACILITY MAP-Work Plan.dwg LAYOUT: 2 SAVED: 1/4/2016 4:25 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 1/4/2016 4:25 PM BY: GONZALEZ, JAMES
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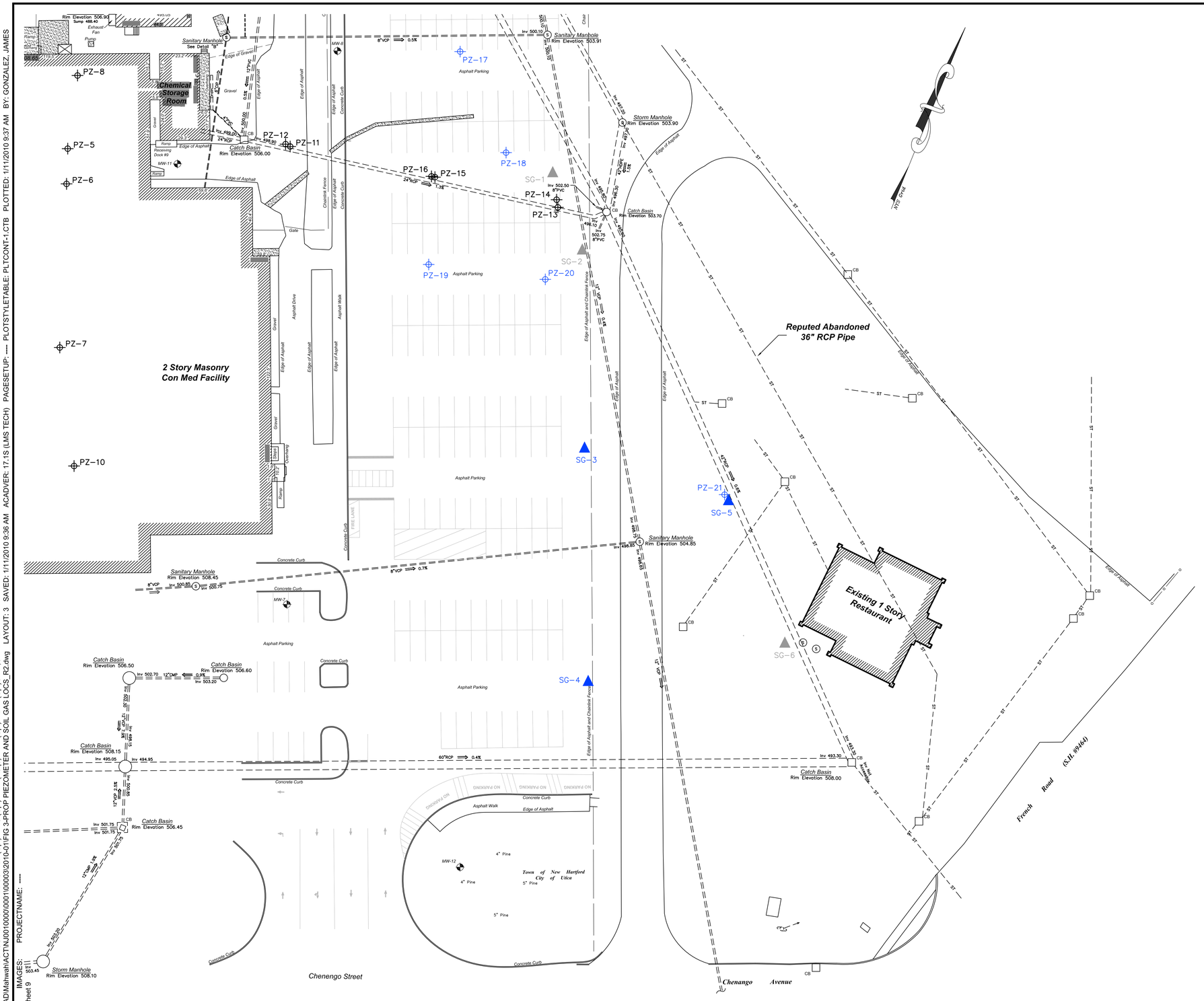

U.S.G.S. Quadrangle
Utica West, New York
1" = 2000' +/-

Legend:

- Storm Line
- 6" Waterline
- Storm Pipe
- Sanitary Pipe
- 500 Major Contour
- Edge of Gravel
- Chain Link Fence
- Light Pole (Single Head)
- Light Pole (4 Head)
- Fire Hydrant
- Existing Concrete
- Sanitary Sewer Manhole
- Storm Drain Manhole
- Catch Basin
- Monitoring Well
- Piezometer Location
- Proposed Soil Gas Sample Location Not Installed
- Newly-Installed Soil Gas Sample Location
- Newly-Installed Piezometer Location

SUPPLEMENTAL INVESTIGATION REPORT
FORMER LOCKHEED MARTIN
FRENCH ROAD FACILITY
UTICA, NEW YORK

PIEZOMETER AND SOIL GAS LOCATIONS

ARCADIS

FIGURE
3

CITY:MAHWAH DIV/GROUP:ENVCAD DB:JG LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Mahwah\ACTIVE\60100000\0001\00003\2010-01\FIG 3-PROP PIEZOMETER AND SOIL GAS LOCS_R2.dwg LAYOUT: 3 SAVED: 1/11/2010 9:36 AM ACADVER: 17.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTCONT-1.CTB PLOTTED: 1/11/2010 9:37 AM BY: GONZALEZ, JAMES
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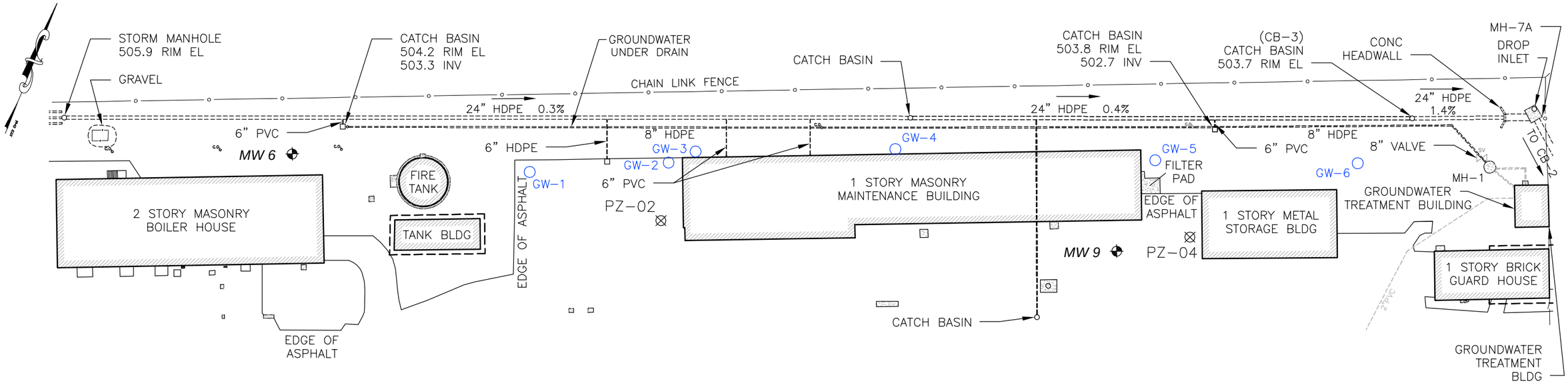
UK156 Sheet 9



LEGEND:

- SEWER VALVE LOCATION
- MW 4 — MONITORING WELL LOCATION
- PZ-02 — PIEZOMETER LOCATION
- GROUNDWATER SAMPLE LOCATION

0 60' 120'

HORIZONTAL SCALE

SUPPLEMENTAL INVESTIGATION REPORT
FORMER LOCKHEED MARTIN
FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER SAMPLE LOCATONS - NORTHERN PERIMETER DITCH

ARCADIS

FIGURE
4

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:(Reqd) TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\Mahwah\ACTN-000100000100010000320100-01\FIG 4- PROP GW SAMP LOC-NORTHERN PERIMETER_R1.dwg LAYOUT: 4- 17X11 SAVED: 1/4/2010 3:59 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: PDF 17X11 PLOTSTYLETABLE: PLTHALF.CTB PLOTTED: 1/4/2010 4:00 PM BY:
GONZALEZ, JAMES
XREFS:
P&PX1
UK156 Sheet 9
IMAGES:
PROJECTNAME: ---

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Appendix A

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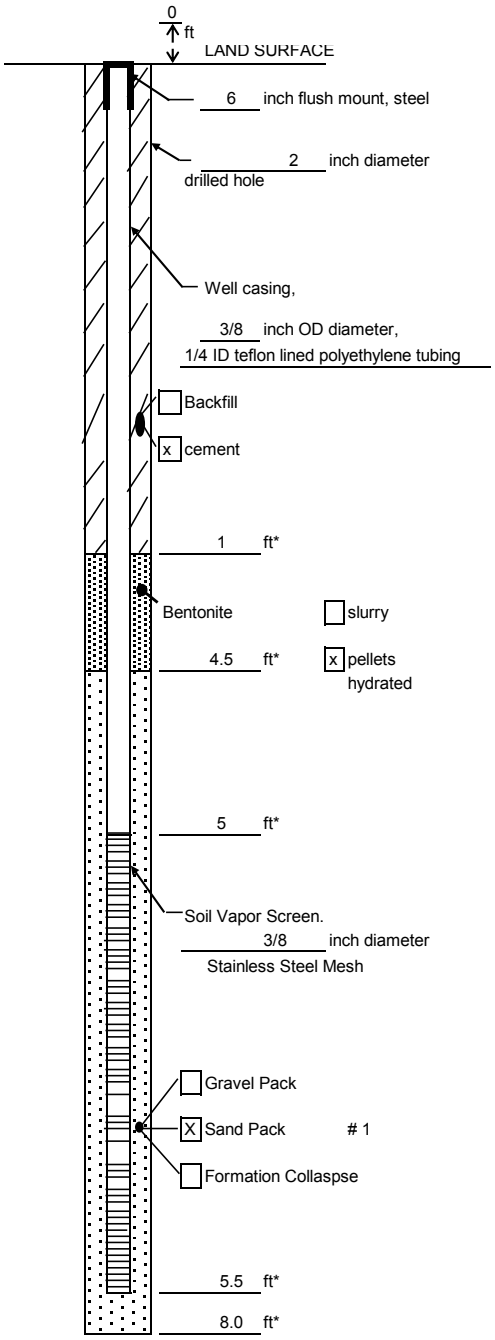
Soil Gas Probe Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well SG-3

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

504.0 feet [x] Surveyed [ ] Estimated

Installation Date(s) 11/20/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

Fluid Loss During Drilling NA gallons

Water Removed During Development NA gallons

Static Depth to Water NA feet below M.P.

Pumping Depth to Water N/A feet below M.P.

Pumping Duration N/A hours

Yield N/A gpm Date N/A

Specific Capacity N/A gpm/ft

Well Purpose Soil vapor sampling

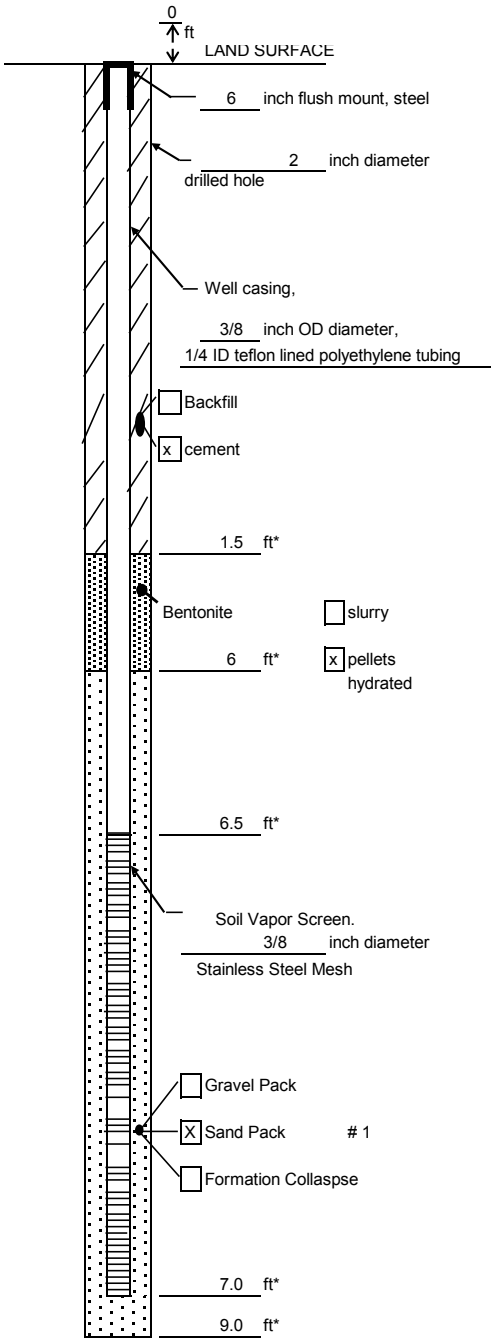
Remarks 5.5 - 8' hydrated bentonite chips.

Prepared by D. Zuck

ARCADIS

Soil Gas Probe Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well SG-4

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

506.0 feet [x] Surveyed [ ] Estimated

Installation Date(s) 11/20/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

Fluid Loss During Drilling NA gallons

Water Removed During Development NA gallons

Static Depth to Water NA feet below M.P.

Pumping Depth to Water N/A feet below M.P.

Pumping Duration N/A hours

Yield N/A gpm Date N/A

Specific Capacity N/A gpm/ft

Well Purpose Soil vapor sampling

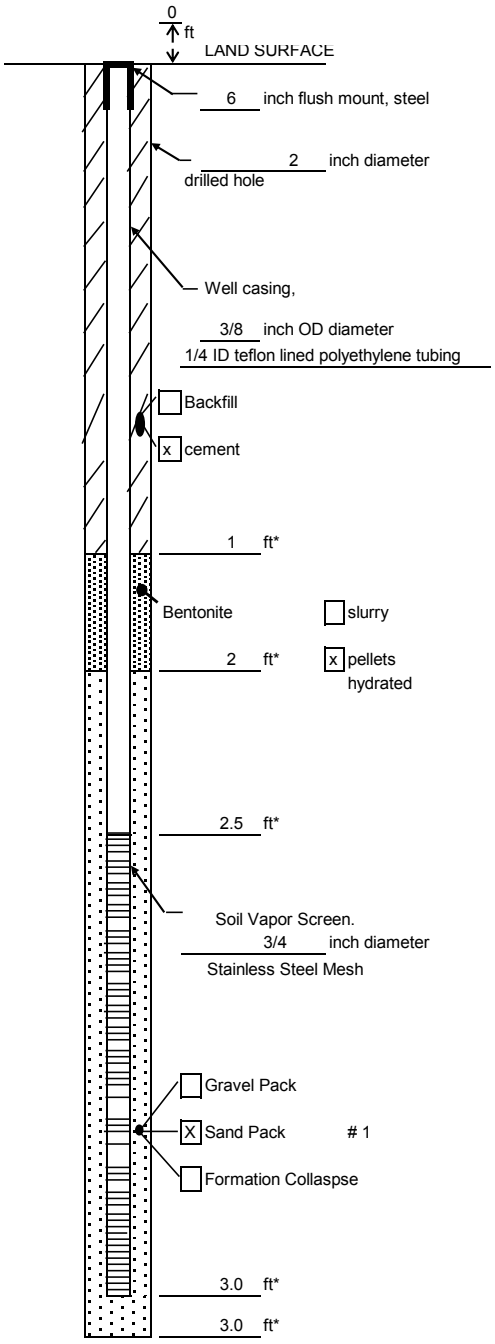
Remarks 7.0 - 9.0' hydrated bentonite chips.

Prepared by D. Zuck

ARCADIS

Soil Gas Probe Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well SG-5

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

506.2 feet [x] Surveyed

[ ] Estimated

Installation Date(s) 11/20/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

Fluid Loss During Drilling NA gallons

Water Removed During Development NA gallons

Static Depth to Water NA feet below M.P.

Pumping Depth to Water N/A feet below M.P.

Pumping Duration N/A hours

Yield N/A gpm Date N/A

Specific Capacity N/A gpm/ft

Well Purpose Soil vapor sampling

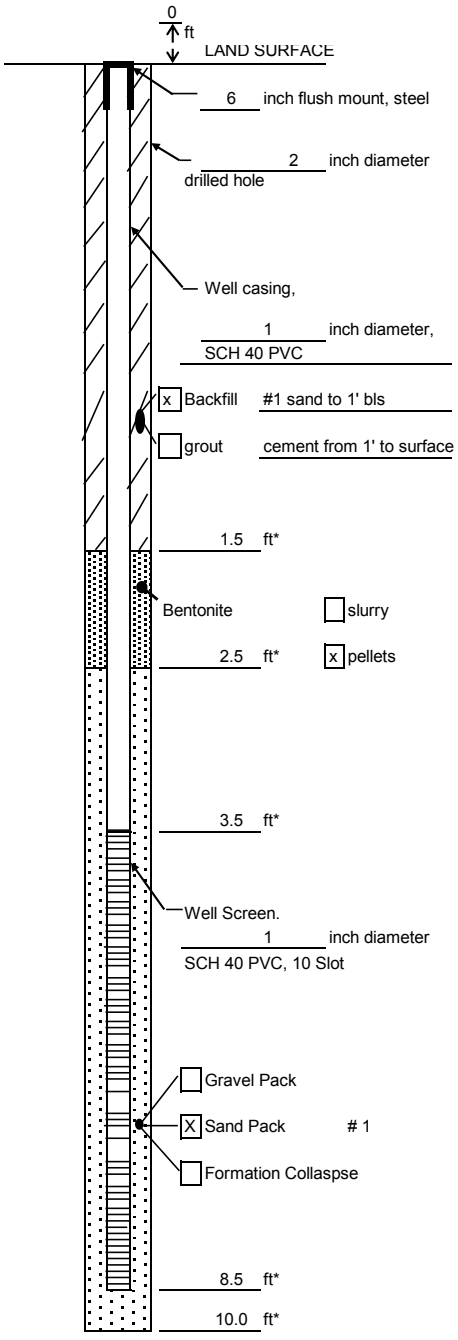
Remarks

Prepared by D. Zuck

ARCADIS

Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well PZ-17

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

504.4 feet [x] Surveyed [ ] Estimated

Installation Date(s) 11/20/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

surge and purge (bailer)

Fluid Loss During Drilling none gallons

Water Removed During Development ____ gallons

Static Depth to Water ____ feet below M.P.

Pumping Depth to Water ____ feet below M.P.

Pumping Duration ____ hours

Yield N/A gpm Date ____

Specific Capacity ____ gpm/ft

Well Purpose Groundwater monitoring

Remarks

8.5 - 10.0' #1 sand

Prepared by D. Zuck

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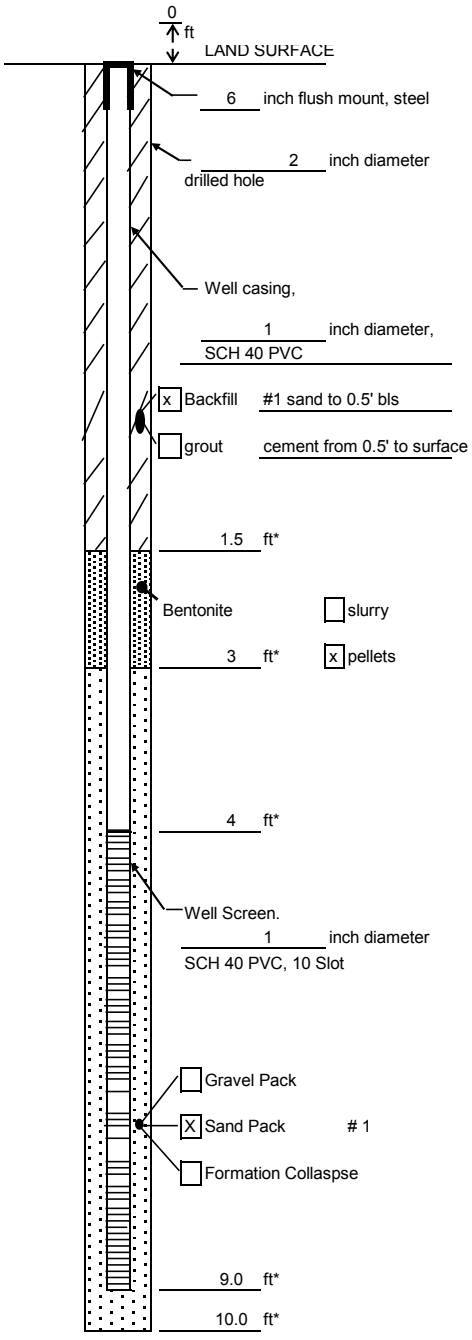
Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well PZ-18

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

504.2 feet [x] Surveyed [ ] Estimated

Installation Date(s) 11/19/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

surge and purge (bailer)

Fluid Loss During Drilling none gallons

Water Removed During Development ____ gallons

Static Depth to Water ____ feet below M.P.

Pumping Depth to Water ____ feet below M.P.

Pumping Duration ____ hours

Yield N/A gpm Date ____

Specific Capacity ____ gpm/ft

Well Purpose Groundwater monitoring

Remarks

9.0 - 10.0' #1 sand

Prepared by D. Zuck

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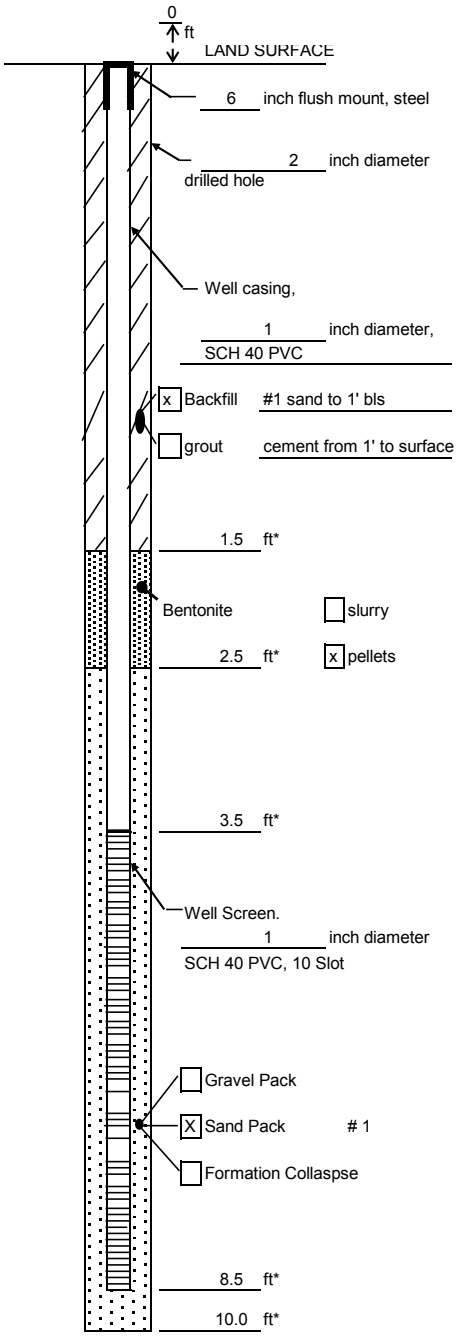
Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well PZ-19

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

504.9 feet [x] Surveyed [ ] Estimated

Installation Date(s) 11/20/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

surge and purge (bailer)

Fluid Loss During Drilling none gallons

Water Removed During Development ____ gallons

Static Depth to Water ____ feet below M.P.

Pumping Depth to Water ____ feet below M.P.

Pumping Duration ____ hours

Yield N/A gpm Date ____

Specific Capacity ____ gpm/ft

Well Purpose Groundwater monitoring

Remarks

8.5 - 10.0' #1 sand

Prepared by D. Zuck

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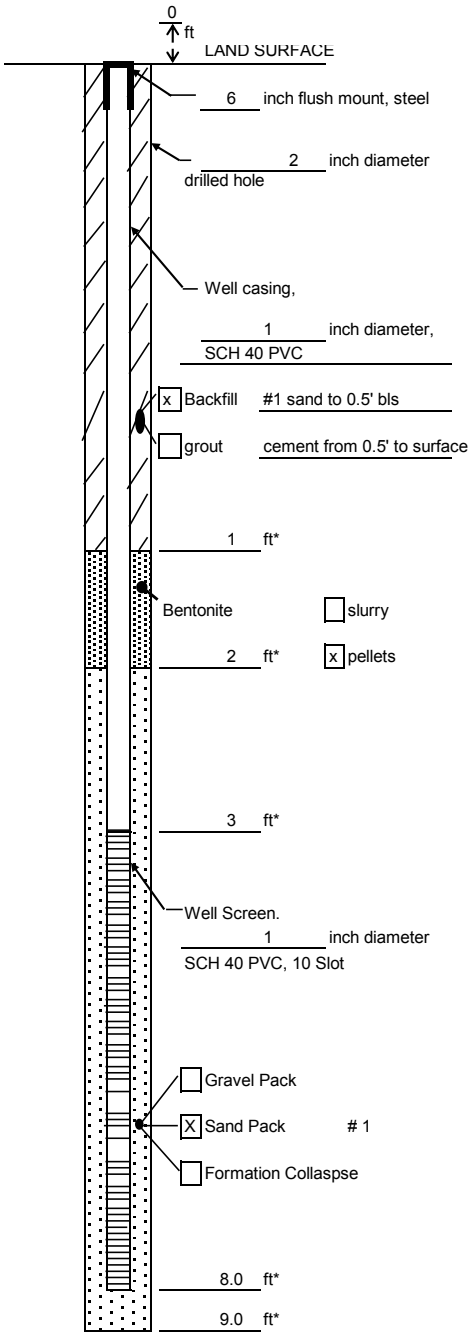
Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well PZ-20

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

504.1 feet [x] Surveyed [ ] Estimated

Installation Date(s) 11/19/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

surge and purge (bailer)

Fluid Loss During Drilling none gallons

Water Removed During Development ____ gallons

Static Depth to Water ____ feet below M.P.

Pumping Depth to Water ____ feet below M.P.

Pumping Duration ____ hours

Yield N/A gpm Date ____

Specific Capacity ____ gpm/ft

Well Purpose Groundwater monitoring

Remarks

8.0 - 9.0' #1 sand

Prepared by D. Zuck

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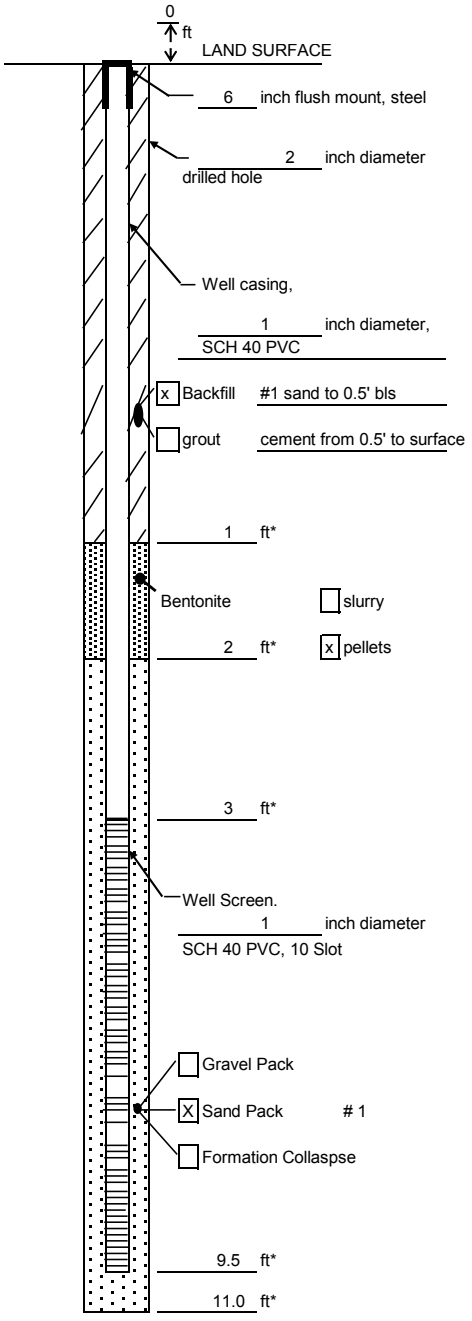
Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project LMC- Utica Well PZ-21

Town/City Utica, NY

County Oneida State NY

Permit No. N/A

Land-Surface Elevation and Datum:

506.0 feet [x] Surveyed [ ] Estimated

Installation Date(s) 11/20/2009

Drilling Method Geoprobe Rig

Drilling Contractor Zebra

Drilling Fluid None

Development Technique(s) and Date(s)

surge and purge (bailer)

Fluid Loss During Drilling none gallons

Water Removed During Development ____ gallons

Static Depth to Water ____ feet below M.P.

Pumping Depth to Water ____ feet below M.P.

Pumping Duration ____ hours

Yield N/A gpm Date ____

Specific Capacity ____ gpm/ft

Well Purpose Groundwater monitoring

Remarks

9.5 - 11' #1 sand

Prepared by D. Zuck

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Sample/Core Log

Boring/Well SG -1 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/20/2009 Drilling Completed 11/20/2009

Total Depth Drilled 9 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan + Jarod

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Air knife / hand cleared	0.0
5	9	3.2	—	0 - 0.7' slough, Gravely SILT, saturated	0.0
				0.7' - 1.5' Dark Brown, SAND, very fine/fine, few silts, trace sub-rounded	
				coarse sand-fine gravel, loose, saturated	
				1.5' - 2.1' Orangish brown, silty GRAVEL, fine/medium sub-rounded/	0.0
				rounded gravel, few coarse sub-rounded gravel/coarse sand,	
				trace very fine/fine sand, loose, wet	
				2.1' - 2.7' Same as 0.7' - 1.5'	0.0
				2.7' - 3.2' Reddish brown, SILT, few coarse-subangular sand, trace fine,	0.0
				coarse sub-rounded gravel, stiff, wet (NP)	

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Sample/Core Log

Boring/Well SG -2 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/20/2009 Drilling Completed 11/20/2009

Total Depth Drilled 10 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan + Jarod

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Air knife / hand cleared	0.0
5	8	3	—	0 - 1' Slough, saturated	0.0
				1' - 2.5' Medium Brown, SAND, medium sub-angular/sub-rounded	0.0
				sands, some coarse sub-rounded sand, trace fine sand, trace fine	
				sub-rounded gravel, loose, wet.	
				2.5' - 2.6' Medium Brown, SAND, fine/very fine sand and silts, few	0.0
				medium sub-angular sands, loose, saturated.	
				2.6' - 3' Same as 1' - 2.5'	0.0
8	10	1.6	—	0 - 0.5' Reddish Brown, SILT, few coarse sub-angular sand, trace	0.0
				medium/coarse subangular gravel, stiff, wet, (NP)	
				0.5' - 1.6' Same as above - dry	0.0

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Sample/Core Log

Boring/Well SG -3 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/20/2009 Drilling Completed 11/20/2009

Total Depth Drilled 8 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan + Jarod

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	0.5	0.5	—	0 - 0.3' Asphalt	
				0.3' - 0.5' GRAVEL, coarse angular	
0.5	4	2	—	0 - 0.3' ASPHALT, residual fragments	0.0
				0.3' - 1.1' Orange Brown, SILT and GRAVEL, fine subangular gravel, few	0.0
				coarse subangular sand, trace medium gravel, stiff, wet, (NP)	
				1.1' - 2.0' Medium Brown, Fine SAND, some very fine/medium sand,	0.0
				few silts, trace fine sub-angular gravels, loose, moist	
4	8	3.3	—	0 - 1.1' Same as above, fractured coarse gravel/pebble at 0.9' - 1.1'	0.0
				1.1' - 2.1' Medium Brown, medium SAND, and fine sand, some very fine/	0.0
				coarse sub-rounded sand, few silts, loose, saturated	
				2.1' - 3.3' Medium Gray, SILT, trace fine sub-rounded gravel/coarse sand,	0.0
				at 2.8' - 3.3' becomes reddish blue medium brown, stiff, wet	

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Sample/Core Log

Boring/Well: SG -4 | Project/No.: Lockheed Martin / NJ000637.0001.00002 | Page: 1 of 1

Site Location: French Road, Utica, NY | Drilling Started: 11/20/2009 | Drilling Completed: 11/20/2009

Total Depth Drilled: 9 Feet | Hole Diameter: 1 3/4" inches | Drilling Method: Geoprobe

Length and Diameter of Coring Device: 4 x 1 3/4" | Type of Coring/Sampling Device: Geoprobe liner

Sampling Interval: 4 feet | Drilling Fluid Used: None

Drilling Contractor: Zebra - Ethan + Jarod

Prepared By: D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	0.5	0.5	—	0 - 0.3' Asphalt	0.0
				0.3' - 0.5' GRAVEL, coarse angular	0.0
0.5	3	1.5	—	0 - 1.5' Med-Dark Brown, Sandy SILT, very fine/fine sand, few coarse sub	0.0
				rounded sand, trace coarse sub-rounded gravel, Dark Brown at 0.7' -	
				0.9', medium stiff, saturated at: 0 - 0.5', 1.1' - 1.5'; wet at 0.5 '- 1.1', (NP)	
3	7	2.9	—	0 - 1.3' same as above, wet, pocket of saturation 0.3' - 0.7'.	0.0
				1.3' - 2.9' Orangish Brown, Silty SAND, medium/coarse	0.0
				subangular sand and fine sand, few medium sub-angular gravels,	
				trace coarse gravel, loose, moist	
7	9	1.3	—	0 - 0.3' Same as above, wet	0.0
				0.3' - 0.8' same as above, saturated	0.0
				0.8' - 1.0' Fractured limestone.2'	0.0
				1' - 1.3' Reddish Blue/medium Brown, SILT, few coarse subangular-	0.0
				angular sand, trace fine sub-rounded gravels, med. dense/stiff (W, NP)	

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Sample/Core Log

Boring/Well PZ-17 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/20/2009 Drilling Completed 11/20/2009

Total Depth Drilled 10 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan + Jarod

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Air knife / hand cleared	0.0
5	8	1	—	0 - 1.0' Medium-Dark Brown, Sandy SILT, very fine/fine sand, few	0.0
				medium/fine subrounded/rounded gravel, medium dense, saturated	
				(NP). Sandstone pebble stuck in shoe	
8	10	2	—	0 - 0.3' Same as above	0.0
				0.3' - 2.0' Reddish Brown, Gravely SILT, fine subangular-angular gravels,	0.0
				few fine sands, trace coarse sub-rounded sands, stiff-medium dense,	
				dry. (NP)	

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Sample/Core Log

Boring/Well PZ-18 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/19/2009 Drilling Completed 11/19/2009

Total Depth Drilled 10 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan + Jarod

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Air knife / hand cleared	0.0
5	8	2	—	0 - 0.6' Medium Brown, Sandy SILT, fine sand, and medium/coarse	0.0
				subangular GRAVEL, few coarse sub-rounded limestone sands, trace	
				coarse quartzite/granite gravel, loose, moist to wet. (NP)	
				0.6' - 1.3' Medium Brown, fine SAND, some medium angular sand, trace	0.0
				coarse sub-rounded sand, loose, moist. (NP)	
				1.3' - 2.0' Orangish Brown, Silty SAND, medium/fine sand, some fine	0.0
				subangular/sub-rounded gravel, few sub-rounded coarse sands, trace	
				medium/coarse sub-rounded/sub-angular gravel (1-2 cm), loose	
				saturated. (NP)	
8	10	2.9	—	0 - 0.9' Slough, Same as above wet, saturated 0.7' - 0.9'	0.0
				0.9 - 1.3' Same as 1.3' - 2.0' from 5' - 8' core, saturated	0.0
				1.3' - 2.9' Reddish Brown, SILT and SAND, coarse sub-angular sand,	0.0
				few medium/ coarse sub-rounded/sub-angular gravel, stiff, moist. (NP)	

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Sample/Core Log

Boring/Well PZ-19 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/20/2009 Drilling Completed 11/20/2009

Total Depth Drilled 10 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan + Jarod

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	0.5	0.5	—	0 - 0.5' ASPHALT cut out	0.0
0.5	4	1.5	—	0 - 0.3' ASPHALT	0.0
				0.3' - 0.5' Aggregate/ angular pebbles - limestone	0.0
				0 - 0.2' same as above	0.0
				0.2' - 0.6' Medium Brown, Gravely SILT, med./coarse sub-rounded gravel,	0.0
				few medium sands, trace asphalt fragments, loose, moist. (NP)	
				0.6' - 1.5' Medium to light Brown, SAND, fine/very fine sand, few silts	0.0
				trace sub-angular coarse sand/fine gravel, loose, wet. (NP)	
4	8	2.7		0 - 1.9' Same as above, except few coarse sands, trace medium/coarse	0.0
				sub-angular/angular LS gravel.	
				1.9' - 2.7' Medium Brown, Sandy SILT, fine/very fine sand, few coarse	0.0
				sub-angular/sub-rounded sand, trace coarse sub-rounded/sub-angular	
				gravel, medium dense, saturated (NP)	
8	10	2.6	—	0 - 0.6' Same as above, some coarse sub-angular/sub-rounded sand.	0.0
				0.6' - 1.1' Reddish Brown, SILT, some coarse sub-angular sand, few	0.0
				medium/fine sub-angular/sub-rounded gravel, trace coarse subrounded	
				gravel, medium dense/dense, moist/wet. (NP)	
				1.1' - 2.6' Same as above, dry	0.0

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Sample/Core Log

Boring/Well PZ-20 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/19/2009 Drilling Completed 11/19/2009

Total Depth Drilled 12 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan + Jarod

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Air knife / hand cleared	0.0
5	8	2.7	—	0 - 0.6' Medium Brown, Silty SAND, medium/fine sand, few coarse sub-	0.0
				angular/sub-rounded limestone fragments (1-2 cm) gravel, trace coarse	
				sub-rounded sand, loose, moist/wet (NP)	
				0.6' - 2.3' Medium Brown, fine SAND, some medium sand, few silts/coarse	0.0
				sub-rounded sand, trace clay at 1.9', loose, saturated (NP)	
				2.3' - 2.7' Orangish Brown, SILT, few medium sub-angular/sub-rounded	0.0
				gravel, stiff, wet/saturated (NP)	
8	12	3.8	—	0 - 1.3' Slough	0.0
				1.3' - 1.6' Reddish Brown, SILT, some coarse sub-angular/angular sand,	0.0
				few fine ~1cm limestone gravel, trace coarse sub-rounded gravel,	
				stiff, wet (NP)	
				1.6' - 3.2' Same as above, dry	0.0
				3.2' - 3.8' Same as 1.3' - 1.6' in 8' - 12' core	0.0

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Sample/Core Log

Boring/Well: PZ-21 | Project/No.: Lockheed Martin / NJ000637.0001.00002 | Page: 1 of 1

Site Location: French Road, Utica, NY | Drilling Started: 11/20/2009 | Drilling Completed: 11/20/2009

Total Depth Drilled: 11 Feet | Hole Diameter: 1 3/4" inches | Drilling Method: Geoprobe

Length and Diameter of Coring Device: 4 x 1 3/4" | Type of Coring/Sampling Device: Geoprobe liner

Sampling Interval: 4 feet | Drilling Fluid Used: None

Drilling Contractor: Zebra - Ethan + Jarod

Prepared By: D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	4	3.9	—	0 - 1.7' Medium Orangish Brown, SILT, few fine sands, organics, trace	0.0
				sub-rounded/sub-angular coarse sand/fine gravel (~ 1-2 cm),	
				soft/loose, wet 0 - 0.3' moist 0.3' - 1.6' (NP)	
				1.7' - 2.7' Medium Brown, Sandy SILT, medium/fine sub-angular/angular	0.0
				sand, some medium/coarse sub-rounded gravels, medium dense,	
				moist/wet. (NP)	
				2.7' - 3.9' Dark Bown/Gray, fine Gravely SILT, few coarse sub-angular	0.0
				sand, trace coarse SS (~3 cm) gravel, stiff, moist/wet (NP)	
4	8	3.6	—	0 - 1.3' Same as above	0.0
				1.3' - 3.2' Orangish Brown, Sandy SILT, fine/very fine sand, some	0.0
				medium angular sand, few coarse sub-angular sand/ fine gravel, trace	
				medium/coarse sub-rounded gravel, medium dense, stiff, moist/wet (NP)	
				3.2' - 3.6' Redish Brown, SILT, few coarse sub-angular/angular sand,	0.0
				trace medium/fine sub-angular/sub-rounded gravel, soft, wet (NP)	
8	10	1.3	—	0 - 0.1' slough	0.0
				0.1' - 0.8' Same as 3.1' - 3.6' in the 4' - 8' core, wet/saturated	0.0
				0.8' - 1.1' Medium Brown, Silty SAND, medium/coarse sub-angular/sub-	0.0
				rounded sand, few fine/med. sub-angular gravel, loose, saturated (NP)	
				1.1' - 1.3' Dark Reddish/Blue Brown, SILT, few coarse sub-angular sands,	0.0
				trace fine sub-rounded gravel, trace medium/fine sand, soft/med.stiff,	
				saturated (NP)	
10	11.2	1.2		0 - 0.4' Slough	0.0
				0.3' - 0.6' Same as 1.1' - 1.3' in the 8' - 10' core	0.0
				0.6' - 1.2' Same as above, dry	0.0

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Sample/Core Log

Boring/Well GW-1 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/16/2009 Drilling Completed 11/16/2009

Total Depth Drilled 7 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Hand cleared / air knife	0.0
				DTW 2' - 2.5' bls	
5	7	1.5	—	0 - 1.5' Grayish Brown, Gravely SILT, course subangular (~1-2 cm)	0.0
				gravel, few fine/medium sands, trace course sub-angular sand, dense,	
				wet/saturated, no odor (NP)	

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Sample/Core Log

Boring/Well: GW-2 | Project/No.: Lockheed Martin / NJ000637.0001.00002 | Page: 1 of 1

Site Location: French Road, Utica, NY | Drilling Started: 11/16/2009 | Drilling Completed: 11/16/2009

Total Depth Drilled: 7 Feet | Hole Diameter: 1 3/4" inches | Drilling Method: Geoprobe

Length and Diameter of Coring Device: 4 x 1 3/4" | Type of Coring/Sampling Device: Geoprobe liner

Sampling Interval: 4 feet | Drilling Fluid Used: None

Drilling Contractor: Zebra - Ethan

Prepared By: D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	air knife	0.0
5	7	2.6	—	0 - 2.6' Grayish Brown, Gravely SILT, course subangular (~1-2 cm)	0.0
				gravel, few fine/medium sands, trace coarse sub-angular/angular sand,	
				dense/very dense, wet, no odor (NP)	

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Sample/Core Log

Boring/Well GW-3 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/16/2009 Drilling Completed 11/16/2009

Total Depth Drilled 6 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Hand clear / air knife	0.0
5	6	0.8	—	0 - 0.8' Medium Brown, Gravely SILT, course subangular (~1-2 cm)	0.0
				gravel, few fine/medium sands, trace coarse sub-angular/angular sand,	
				loose/med. dense, wet, no odor (NP)	

ARCADIS

Sample/Core Log

Boring/Well GW-4 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/17/2009 Drilling Completed 11/17/2009

Total Depth Drilled 7 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Hand clear / air knife	0.0
5	7	1.2	—	0 - 1.2' Medium Brown tint of Red, Gravely SILT, (~1-2 cm) angular/sub-	0.0
				angular gravel, few medium/fine sands, trace coarse sub-angular/	
				angular sand, dense, wet (0 - 0.3' saturated), no odor (NP)	

ARCADIS

Sample/Core Log

Boring/Well GW-5 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/18/2009 Drilling Completed 11/18/2009

Total Depth Drilled 8.5 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	4	—	—	Air knife / hand knife	0.0
4	8	3.7	—	0 - 2.9' Medium Brown tint of Red, Gravely SILT, (~1-2 cm) angular/sub-	0.0
				angular gravel, few medium/fine sands, trace coarse sub-angular sand,	
				trace (~3 cm) pebble at 0 - 0.2', very dense, moist (NP)	
				2.9' - 3.7' Medium Brown, Sandy SILT, medium/fine sand, and	
				sub-angular (~1-2 cm) GRAVEL , few coarse sub-angular sands, loose,	0.0
				saturated (NP)	
8	12	0.5	—	Refusal at 8.5', 0 - 0.5' Same as above	0.0

ARCADIS

Sample/Core Log

Boring/Well GW-6 Project/No. Lockheed Martin / NJ000637.0001.00002 Page 1 of 1

Site Location French Road, Utica, NY Drilling Started 11/18/2009 Drilling Completed 11/18/2009

Total Depth Drilled 15 Feet Hole Diameter 1 3/4" inches Drilling Method Geoprobe

Length and Diameter of Coring Device 4 x 1 3/4" Type of Coring/Sampling Device Geoprobe liner

Sampling Interval 4 feet Drilling Fluid Used None

Drilling Contractor Zebra - Ethan

Prepared By D. Zuck

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	Sample/Core Description	PID (ppm)
0	5	—	—	Hand cleared, at ~2.5' very dense, dry till down to 4', dense till, reddish	0.0
				brown	
5	8	3.9	—	0- 0.6' Medium Brown tint of Red, course Gravely SILT, few medium/fine	0.0
				sands, trace coarse angular/sub-angular sand, dense/very dense, (NP)	
				[1-2 cm angular pebbles fall in from above]	
				0.6' - 0.9' Fractured LIMESTONE, light gray, dry, 0.1' - 0.2' stone	0.0
				0.9' - 3.9' same as 0 - 0.6'	0.0
8	12	3.9	—	0- 0.5' Same as above	0.0
				0.5' - 2.9' Medium/Dark Brown, Silty CLAY, some varving throughout,	0.4
				very dense, moist/wet (NP)	
			SAMPLE	2.9' - 3.9' Same as 0 - 0.5' trace 0.1 pebbles, sub-rounded	36.2
12	15	3.7	—	0 - 0.8' slough, clay fragments,	0.0
				0.8' - 3.7' Medium/Dark Brown, Sandy SILT, medium/fine sand, some	0.8
				sub-rounded (~1-3 cm) pebbles, few coarse sub-rounded sands,	
				dense, wet, saturated at 1.3' - 1.7' (NP); refusal at 15'.	

ARCADIS

Appendix B

Centek Laboratories, LLC

October

143 Midler Park Drive
Syracuse, NY 13206
(315) 431-9730
www.CentekLabs.com

Arcadis

Sample Data Package
December 1, 2009

LMC Solvent Dock

C0912007

Volume 1 of 1

- **Work Order Summary**
- **Analytical Results Summary**
- **Quality Control Summary**
- **Sample Data**
- **Standards Data**
- **Raw Data**

CONFIDENTIAL

TO-15 Package Review Checklist

Client: ARCADIS Project: LMC UTICA SDG: C09/2007

		YES	NO	NA
Analytical Results	Present and Complete	✓		
TIC's present	Present and Complete	✓		
	Holding Times Met	✓		

Comments:

Chain-of-Custody	Present and Complete	✓		
Surrogate Recovery	Present and Complete	✓		
	Recoveries within limits	✓		
	Sample(s) reanalyzed			✓
Internal Standards Recovery	Present and Complete	✓		
	Recoveries within limits	✓		
	Sample(s) reanalyzed			✓

Comments:

Lab Control Sample (LCS)	Present and Complete	✓		
	Recoveries within limits	✓		
Lab Control Sample Dupe (LCSD)	Present and Complete	✓		
	Recoveries within limits	✓		
MS/MSD	Present and Complete			
	Recoveries within limits			

Comments:

Sample Raw Data	Present and Complete	✓		
	Spectra present for all samples	✓		

Comments:

TO-15 Package Review Checklist

Client: ARCADIS Project: LMC UTICA SDG: C09/2007

		YES	NO	NA
Standards Data				
Initial Calibration Summary	Present and Complete	✓		
	Calibration(s) met criteria	✓		
Continuing Calibration Summary	Present and Complete	✓		
	Calibration(s) met criteria	✓		
Standards Raw Data	Present and Complete	✓		

Comments:

Raw Quality Control Data

Tune Criteria Report	Present and Complete	✓		
Method Blank Data	MB Results <PQL	✓		
	Associated results flagged "B"			✓
LCS sample data	Present and Complete	✓		
LCSD sample data	Present and Complete	✓		
MS/MSD sample data	Present and Complete	✓		

Comments:

Logbooks

Injection Log	Present and Complete	✓		
Standards Log	Present and Complete	✓		
Can Cleaning Log	Present and Complete	✓		
	Raw Data Present	✓		
Calculation sheet	Present and Complete	✓		
IDL's	Present and Complete	✓		
Bottle Order Form	Present and Complete	✓		
Sample Tracking Form	Present and Complete	✓		

Additional Comments:

Section Supervisor: N/A Date: 12/17/09

QC Supervisor: [signature] Date: 12/17/09

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206

Phone (315) 431-9730 * Fax (315) 431-9731 * Emergency 24/7 (315) 416-2751

NELAC Certificate No. 11830

www.CentekLabs.com

Wednesday, December 09, 2009

Mr. Jeffrey Bonsteel
Arcadis
465 New Karner Road
First Floor
Albany, NY 12205

TEL: (518) 452-7826
FAX 716-655-4307

RE: LMC Utica

Dear Mr. Jeffrey Bonsteel: Order No.: C0912007

Centek Laboratories, LLC received 3 sample(s) on 12/3/2009 for the analyses presented in the following report.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

Please contact us at (315) 431-9730, if you would like any additional information regarding this report.

Sincerely,

Russell Pellegrino
Laboratory Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages.

ASP CAT B LIKE DELIVERABLE PACKAGE
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12. **Log Books**
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    b. Standards Log Book
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Centek Laboratories, LLC **Date:** *17-Dec-09*

CLIENT: Arcadis
Project: LMC Utica
Lab Order: C0912007

CASE NARRATIVE

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

Centek Laboratories, LLC

143 Midler Park Drive
Syracuse, NY 13206
Phone: 315-431-9730 Fax: 315-431-9731 Emergency: 315-416-2751 / 416-2752

Chain of Custody

Site Name: LMC Utica
Project:
PO#: NJ000637.0001.00002
Other:

Detection Limit	Report Level
☐ 5ppbv	☐ Level I
☐ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE .25	☐ Cat "B" Like

Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	12/7/09
4 Business Days	☐	35%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
Next Day by 5pm	☐	100%	
Next Day by Noon	☐	150%	
Same Day	☐	200%	

Company: Arcadis
Report: Jeff Bonsteel
465 New Karner Rd. First Floor
Albany, NY 12205
Phone: 518-452-7826
Fax: 518-452-7086
Email: JBonsteel@Arcadis-US.com

Company: Arcadis
Invoice: SAME
Phone:
Fax:
Email:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Comments	Vacuum Start/Stop
AMB-120109	12/1/09	274	345	TO-15		-29/-18
SG-3	12/1/09	548	343	TO-15		-28.5/-5
SG-4	12/1/09	314	68	TO-15		-31/-5.5

COC 1 of 1

Chain of Custody	Print Name	Signature	Date/Time	Courier:
Sampled by:	Daniel Ends		12/1/09 1648	UPS
Relinquished by:	Daniel Ends		12/2/09 1518	
Received at Lab by:	Jeff Scala		12-2-09 15:16	

www.CentekLabs.com

Centek Laboratories, LLC

Date: *17-Dec-09*

CLIENT: Arcadis
Project: LMC Utica
Lab Order: C0912007

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C0912007-001A	AMB-120109	274,345	12/1/2009	12/3/2009
C0912007-002A	SG-3	549,343	12/1/2009	12/3/2009
C0912007-003A	SG-4	314,68	12/1/2009	12/3/2009

Centek Laboratories, LLC

Sample Receipt Checklist

Client Name **ARCADIS - ALBANY** Date and Time Receive **12/3/2009**

Work Order Numbe **C0912007** Received by JDS

Checklist completed b _____ 12/3/09 Reviewed by _____ 12/3/09
Signature Date Initials Date

Matrix Carrier name Courier (Centek)

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☑	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section b

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Sample ID:	Action:	ActionDate:	Person:	NewLocation:
C0912007-001A	Login	12/3/2009 10:22:00 AM	russ	GC/MS Lab
C0912007-003A	Login	12/3/2009 10:24:19 AM	russ	GC/MS Lab
C0912007-002A	Login	12/3/2009 10:24:19 AM	russ	GC/MS Lab
C0912007-001A	Mark as Consumed	12/6/2009 2:35:27 PM	ADM	Consumed
C0912007-002A	Mark as Consumed	12/6/2009 2:35:27 PM	ADM	Consumed
C0912007-003A	Mark as Consumed	12/6/2009 2:35:27 PM	ADM	Consumed

Lab Order: C0912007
Client: Arcadis
Project: LMC Utica

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C0912007-001A	AMB-120109	12/1/2009	Air	1ug/M3 by Method TO15			12/4/2009
C0912007-002A	SG-3			1ug/M3 by Method TO15			12/4/2009
				1ug/M3 by Method TO15			12/4/2009
C0912007-003A	SG-4			1ug/M3 by Method TO15			12/4/2009
				1ug/M3 by Method TO15			12/4/2009

Centek Laboratories, LLC
143 Midler Park Drive
Syracuse, NY 13206
TEL: *3154319730* FAX: *3154319731*

BOTTLE ORDER

1571

17-Dec-09

SHIPPED TO:

Company: Arcadis
Contact: Mr. Todd Carignan
Address: 465 New Karner Road
First Floor
Albany, NY 12205
Phone: (518) 452-7826

Quote ID: 716
Project:

Submitted By:

Ship Date: 11/24/2009
VIA: UPS
Due Date: 11/25/2009

Bottle Code	Bottle Type	TEST(s)	QTY
MC1000CC	1L Mini-Can	1ug/M3 by Method TO15	4

Can / Reg ID	Description
203	1L Mini-Can - 1158
232	1L Mini-Can - 1163
320	1L Mini-Can - 1283
462	1L Mini-Can - 1365

Comments: 4 1L w/ quick grabs. Sned to Power Pellet Attn: ARCADIS, Chris Davern,4715 State Highway 30, Amsterdam, NY 12010 WAC111709F

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

ANALYTICAL RESULTS

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-18			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.24	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/4/2009
Acetone	3.7	0.30		ppbV	1	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	0.20	0.15		ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	< 0.15	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	0.30	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	0.84	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.21	0.15		ppbV	1	12/4/2009
Freon 113	< 0.15	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.41	0.15		ppbV	1	12/4/2009
Heptane	0.15	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	< 0.15	0.15		ppbV	1	12/4/2009
Isopropyl alcohol	1.5	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.21	0.30	J	ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	0.15	0.30	J	ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	0.43	0.15		ppbV	1	12/4/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.21	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.38	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	1.6	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	94.0	70-130		%REC	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	1.2	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	< 0.75	0.75		ug/m3	1	12/4/2009
Acetone	9.0	0.72		ug/m3	1	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	0.65	0.49		ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	0.63	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	3.4	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/4/2009
Freon 11	1.2	0.86		ug/m3	1	12/4/2009
Freon 113	< 1.2	1.2		ug/m3	1	12/4/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	0.62	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	< 0.54	0.54		ug/m3	1	12/4/2009
Isopropyl alcohol	3.7	0.37		ug/m3	1	12/4/2009
m&p-Xylene	0.93	1.3	J	ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	0.45	0.90	J	ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	1.5	0.53		ug/m3	1	12/4/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	1.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	1.5	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	8.6	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-4			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	3.6	1.5		ppbV	10	12/4/2009
1,1,1-Trichloroethane	3.4	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.60	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	0.13	0.15	J	ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	0.24	0.15		ppbV	1	12/4/2009
Acetone	6.7	3.0		ppbV	10	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	0.12	0.15	J	ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	0.55	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.22	0.15		ppbV	1	12/4/2009
Freon 11	0.17	0.15		ppbV	1	12/4/2009
Freon 113	0.20	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.42	0.15		ppbV	1	12/4/2009
Heptane	0.18	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	0.14	0.15	J	ppbV	1	12/4/2009
Isopropyl alcohol	0.52	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.70	0.30		ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	0.17	0.30	J	ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	< 0.15	0.15		ppbV	1	12/4/2009
o-Xylene	0.22	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.78	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.58	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	0.39	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	20	8.3		ug/m3	10	12/4/2009
1,1,1-Trichloroethane	19	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	3.0	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	0.65	0.75	J	ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	1.2	0.75		ug/m3	1	12/4/2009
Acetone	16	7.2		ug/m3	10	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	0.39	0.49	J	ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	1.7	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	< 0.31	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	0.97	0.66		ug/m3	1	12/4/2009
Freon 11	0.97	0.86		ug/m3	1	12/4/2009
Freon 113	1.6	1.2		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	0.75	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	0.50	0.54	J	ug/m3	1	12/4/2009
Isopropyl alcohol	1.3	0.37		ug/m3	1	12/4/2009
m&p-Xylene	3.1	1.3		ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	0.51	0.90	J	ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	< 0.53	0.53		ug/m3	1	12/4/2009
o-Xylene	0.97	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	5.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	2.2	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	2.1	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-6			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.15	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.38	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	0.12	0.15	J	ppbV	1	12/4/2009
Acetone	8.4	3.0		ppbV	10	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	< 0.15	0.15		ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	0.21	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.15	0.15		ppbV	1	12/4/2009
Freon 113	1.2	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.42	0.15		ppbV	1	12/4/2009
Heptane	< 0.15	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	< 0.15	0.15		ppbV	1	12/4/2009
Isopropyl alcohol	2.0	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.25	0.30	J	ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	0.47	0.15		ppbV	1	12/4/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.21	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.22	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	87.0	70-130		%REC	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.83	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	1.9	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	0.60	0.75	J	ug/m3	1	12/4/2009
Acetone	20	7.2		ug/m3	10	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	< 0.49	0.49		ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	0.66	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	< 0.31	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/4/2009
Freon 11	0.86	0.86		ug/m3	1	12/4/2009
Freon 113	9.5	1.2		ug/m3	1	12/4/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	< 0.62	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	< 0.54	0.54		ug/m3	1	12/4/2009
Isopropyl alcohol	4.9	0.37		ug/m3	1	12/4/2009
m&p-Xylene	1.1	1.3	J	ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	1.7	0.53		ug/m3	1	12/4/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	1.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	0.84	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	< 0.82	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

QUALITY CONTROL SUMMARY

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AG120404.D
Tune Time : 4 Dec 2009 11:55

Daily Calibration File : C:\HPCHEM\1\DATA\AG120404.D

		(BFB)		(IS1)	(IS2)	(IS3)
				19192	40876	38624
File	Sample	Surrogate Recovery %		Internal Standard Responses		
AG120405.D	LCS1UT-120409	105		19186	39372	37269
AG120406.D	MB1UT-120409	77		17562	34957	30186
AG120426.D	C0912007-001A	94		17510	34976	32287
AG120427.D	C0912007-002A	92		18000	38176	39090
AG120428.D	C0912007-003A	87		18055	39425	37545
AG120429.D	LCS1UTD-12040	109		18028	33898	32201
AG120442.D	C0912007-002A	76	DL10x	20555	41169	36006
AG120443.D	C0912007-003A	80	DL10x	21460	42139	38818

t - fails 24hr time check * - fails criteria

Created: Wed Dec 16 16:19:14 2009 MSD #1/

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica
Test No: TO-15 **Matrix:** A

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	BR4FBZ						
C0912007-001A	94.0						
C0912007-002A	92.0						
C0912007-003A	87.0						
LCS1UT-120409	105						
LCS1UTD-120409	109						
MB1UT-120409	77.0						

Acronym		Surrogate	QC Limits
BR4FBZ	=	Bromofluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **MB1UT-120409** SampType: **MBLK** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38484**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	< 0.15	0.15									
1,1,2,2-Tetrachloroethane	< 0.15	0.15									
1,1,2-Trichloroethane	< 0.15	0.15									
1,1-Dichloroethane	< 0.15	0.15									
1,1-Dichloroethene	< 0.15	0.15									
1,2,4-Trichlorobenzene	< 0.15	0.15									
1,2,4-Trimethylbenzene	< 0.15	0.15									
1,2-Dibromoethane	< 0.15	0.15									
1,2-Dichlorobenzene	< 0.15	0.15									
1,2-Dichloroethane	< 0.15	0.15									
1,2-Dichloropropane	< 0.15	0.15									
1,3,5-Trimethylbenzene	< 0.15	0.15									
1,3-butadiene	< 0.15	0.15									
1,3-Dichlorobenzene	< 0.15	0.15									
1,4-Dichlorobenzene	< 0.15	0.15									
1,4-Dioxane	< 0.30	0.30									
2,2,4-trimethylpentane	< 0.15	0.15									
4-ethyltoluene	< 0.15	0.15									
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.15	0.15									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									

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Qualifiers:

. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: MB1UT-120409	SampType: MBLK	TestCode: 1ugM3_TO15	Units: ppbV	Prep Date:	RunNo: 3076
Client ID: ZZZZZ	Batch ID: R3076	TestNo: TO-15		Analysis Date: 12/4/2009	SeqNo: 38484

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Dibromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.25	0.25									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									
Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.15	0.15									

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Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **MB1UT-120409** SampType: **MBLK** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38484**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.15	0.15									

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UT-120409** SampType: **LCS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.160	0.15	1	0	116	70	130				
1,1,2,2-Tetrachloroethane	1.170	0.15	1	0	117	70	130				
1,1,2-Trichloroethane	1.170	0.15	1	0	117	70	130				
1,1-Dichloroethane	0.9700	0.15	1	0	97.0	70	130				
1,1-Dichloroethene	0.8900	0.15	1	0	89.0	70	130				
1,2,4-Trichlorobenzene	1.140	0.15	1	0	114	70	130				
1,2,4-Trimethylbenzene	1.060	0.15	1	0	106	70	130				
1,2-Dibromoethane	1.090	0.15	1	0	109	70	130				
1,2-Dichlorobenzene	1.150	0.15	1	0	115	70	130				
1,2-Dichloroethane	0.9700	0.15	1	0	97.0	70	130				
1,2-Dichloropropane	1.080	0.15	1	0	108	70	130				
1,3,5-Trimethylbenzene	1.090	0.15	1	0	109	70	130				
1,3-butadiene	1.000	0.15	1	0	100	70	130				
1,3-Dichlorobenzene	1.140	0.15	1	0	114	70	130				
1,4-Dichlorobenzene	1.160	0.15	1	0	116	70	130				
1,4-Dioxane	1.150	0.30	1	0	115	70	130				
2,2,4-trimethylpentane	1.000	0.15	1	0	100	70	130				
4-ethyltoluene	0.9500	0.15	1	0	95.0	70	130				
Acetone	0.9500	0.30	1	0	95.0	70	130				
Allyl chloride	0.8800	0.15	1	0	88.0	70	130				
Benzene	1.110	0.15	1	0	111	70	130				
Benzyl chloride	1.000	0.15	1	0	100	70	130				
Bromodichloromethane	1.150	0.15	1	0	115	70	130				
Bromoform	1.080	0.15	1	0	108	70	130				
Bromomethane	0.9000	0.15	1	0	90.0	70	130				
Carbon disulfide	1.240	0.15	1	0	124	70	130				
Carbon tetrachloride	1.110	0.15	1	0	111	70	130				
Chlorobenzene	1.040	0.15	1	0	104	70	130				
Chloroethane	0.8800	0.15	1	0	88.0	70	130				

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

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CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UT-120409** SampType: **LCS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	1.030	0.15	1	0	103	70	130				
Chloromethane	0.9100	0.15	1	0	91.0	70	130				
cis-1,2-Dichloroethene	0.8900	0.15	1	0	89.0	70	130				
cis-1,3-Dichloropropene	1.110	0.15	1	0	111	70	130				
Cyclohexane	1.070	0.15	1	0	107	70	130				
Dibromochloromethane	1.050	0.15	1	0	105	70	130				
Ethyl acetate	0.9600	0.25	1	0	96.0	70	130				
Ethylbenzene	0.9800	0.15	1	0	98.0	70	130				
Freon 11	0.9500	0.15	1	0	95.0	70	130				
Freon 113	0.9200	0.15	1	0	92.0	70	130				
Freon 114	0.9200	0.15	1	0	92.0	70	130				
Freon 12	1.030	0.15	1	0	103	70	130				
Heptane	0.9500	0.15	1	0	95.0	70	130				
Hexachloro-1,3-butadiene	1.340	0.15	1	0	134	70	130				S
Hexane	0.9100	0.15	1	0	91.0	70	130				
Isopropyl alcohol	0.9400	0.15	1	0	94.0	70	130				
m&p-Xylene	2.150	0.30	2	0	108	70	130				
Methyl Butyl Ketone	0.9500	0.30	1	0	95.0	70	130				
Methyl Ethyl Ketone	0.9500	0.30	1	0	95.0	70	130				
Methyl Isobutyl Ketone	1.010	0.30	1	0	101	70	130				
Methyl tert-butyl ether	0.9000	0.15	1	0	90.0	70	130				
Methylene chloride	0.8500	0.15	1	0	85.0	70	130				
o-Xylene	0.9900	0.15	1	0	99.0	70	130				
Propylene	0.9200	0.15	1	0	92.0	70	130				
Styrene	1.010	0.15	1	0	101	70	130				
Tetrachloroethylene	1.090	0.15	1	0	109	70	130				
Tetrahydrofuran	0.9000	0.15	1	0	90.0	70	130				
Toluene	1.020	0.15	1	0	102	70	130				
trans-1,2-Dichloroethene	0.8600	0.15	1	0	86.0	70	130				
trans-1,3-Dichloropropene	1.020	0.15	1	0	102	70	130				
Trichloroethene	1.060	0.15	1	0	106	70	130				

Qualifiers:
. Results reported are not blank corrected
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected at or below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UT-120409** SampType: **LCS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	0.7700	0.15	1	0	77.0	70	130				
Vinyl Bromide	0.9100	0.15	1	0	91.0	70	130				
Vinyl chloride	0.8300	0.15	1	0	83.0	70	130				

Sample ID: **LCS1UTD-120409** SampType: **LCSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.280	0.15	1	0	128	70	130	1.16	9.84	30	
1,1,2,2-Tetrachloroethane	1.240	0.15	1	0	124	70	130	1.17	5.81	30	
1,1,2-Trichloroethane	1.250	0.15	1	0	125	70	130	1.17	6.61	30	
1,1-Dichloroethane	0.9800	0.15	1	0	98.0	70	130	0.97	1.03	30	
1,1-Dichloroethene	0.9300	0.15	1	0	93.0	70	130	0.89	4.40	30	
1,2,4-Trichlorobenzene	1.530	0.15	1	0	153	70	130	1.14	29.2	30	S
1,2,4-Trimethylbenzene	1.250	0.15	1	0	125	70	130	1.06	16.5	30	
1,2-Dibromoethane	1.260	0.15	1	0	126	70	130	1.09	14.5	30	
1,2-Dichlorobenzene	1.380	0.15	1	0	138	70	130	1.15	18.2	30	S
1,2-Dichloroethane	0.9900	0.15	1	0	99.0	70	130	0.97	2.04	30	
1,2-Dichloropropane	1.230	0.15	1	0	123	70	130	1.08	13.0	30	
1,3,5-Trimethylbenzene	1.270	0.15	1	0	127	70	130	1.09	15.3	30	
1,3-butadiene	0.9700	0.15	1	0	97.0	70	130	1	3.05	30	
1,3-Dichlorobenzene	1.320	0.15	1	0	132	70	130	1.14	14.6	30	S
1,4-Dichlorobenzene	1.380	0.15	1	0	138	70	130	1.16	17.3	30	S
1,4-Dioxane	1.090	0.30	1	0	109	70	130	1.15	5.36	30	
2,2,4-trimethylpentane	1.120	0.15	1	0	112	70	130	1	11.3	30	
4-ethyltoluene	1.080	0.15	1	0	108	70	130	0.95	12.8	30	
Acetone	1.080	0.30	1	0	108	70	130	0.95	12.8	30	
Allyl chloride	0.7200	0.15	1	0	72.0	70	130	0.88	20.0	30	
Benzene	1.120	0.15	1	0	112	70	130	1.11	0.897	30	
Benzyl chloride	1.180	0.15	1	0	118	70	130	1	16.5	30	

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

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CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UTD-120409** SampType: **LCSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	1.170	0.15	1	0	117	70	130	1.15	1.72	30	
Bromoform	1.270	0.15	1	0	127	70	130	1.08	16.2	30	
Bromomethane	0.9500	0.15	1	0	95.0	70	130	0.9	5.41	30	
Carbon disulfide	1.270	0.15	1	0	127	70	130	1.24	2.39	30	
Carbon tetrachloride	1.290	0.15	1	0	129	70	130	1.11	15.0	30	
Chlorobenzene	1.180	0.15	1	0	118	70	130	1.04	12.6	30	
Chloroethane	0.9100	0.15	1	0	91.0	70	130	0.88	3.35	30	
Chloroform	1.070	0.15	1	0	107	70	130	1.03	3.81	30	
Chloromethane	0.9800	0.15	1	0	98.0	70	130	0.91	7.41	30	
cis-1,2-Dichloroethene	0.8900	0.15	1	0	89.0	70	130	0.89	0	30	
cis-1,3-Dichloropropene	1.230	0.15	1	0	123	70	130	1.11	10.3	30	
Cyclohexane	1.180	0.15	1	0	118	70	130	1.07	9.78	30	
Dibromochloromethane	1.210	0.15	1	0	121	70	130	1.05	14.2	30	
Ethyl acetate	0.9100	0.25	1	0	91.0	70	130	0.96	5.35	30	
Ethylbenzene	1.160	0.15	1	0	116	70	130	0.98	16.8	30	
Freon 11	1.020	0.15	1	0	102	70	130	0.95	7.11	30	
Freon 113	1.340	0.15	1	0	134	70	130	0.92	37.2	30	SR
Freon 114	0.9900	0.15	1	0	99.0	70	130	0.92	7.33	30	
Freon 12	1.050	0.15	1	0	105	70	130	1.03	1.92	30	
Heptane	1.080	0.15	1	0	108	70	130	0.95	12.8	30	
Hexachloro-1,3-butadiene	1.690	0.15	1	0	169	70	130	1.34	23.1	30	S
Hexane	0.9300	0.15	1	0	93.0	70	130	0.91	2.17	30	
Isopropyl alcohol	0.9200	0.15	1	0	92.0	70	130	0.94	2.15	30	
m&p-Xylene	2.480	0.30	2	0	124	70	130	2.15	14.3	30	
Methyl Butyl Ketone	0.9800	0.30	1	0	98.0	70	130	0.95	3.11	30	
Methyl Ethyl Ketone	0.9300	0.30	1	0	93.0	70	130	0.95	2.13	30	
Methyl Isobutyl Ketone	1.020	0.30	1	0	102	70	130	1.01	0.985	30	
Methyl tert-butyl ether	0.8900	0.15	1	0	89.0	70	130	0.9	1.12	30	
Methylene chloride	1.130	0.15	1	0	113	70	130	0.85	28.3	30	
o-Xylene	1.170	0.15	1	0	117	70	130	0.99	16.7	30	
Propylene	0.9400	0.15	1	0	94.0	70	130	0.92	2.15	30	

Qualifiers:
. Results reported are not blank corrected
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected at or below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UTD-120409** SampType: **LCSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	1.200	0.15	1	0	120	70	130	1.01	17.2	30	
Tetrachloroethylene	1.250	0.15	1	0	125	70	130	1.09	13.7	30	
Tetrahydrofuran	0.8600	0.15	1	0	86.0	70	130	0.9	4.55	30	
Toluene	1.110	0.15	1	0	111	70	130	1.02	8.45	30	
trans-1,2-Dichloroethene	0.9000	0.15	1	0	90.0	70	130	0.86	4.55	30	
trans-1,3-Dichloropropene	1.180	0.15	1	0	118	70	130	1.02	14.5	30	
Trichloroethene	1.270	0.15	1	0	127	70	130	1.06	18.0	30	
Vinyl acetate	0.7800	0.15	1	0	78.0	70	130	0.77	1.29	30	
Vinyl Bromide	0.9500	0.15	1	0	95.0	70	130	0.91	4.30	30	
Vinyl chloride	0.8700	0.15	1	0	87.0	70	130	0.83	4.71	30	

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

Compound	Amount	IDL # 1	IDL # 2	IDL # 3	IDL # 4	IDL # 5	IDL # 6	IDL # 7	Avg	Stdev	%Rec	IDL
Propylene	0.30	0.34	0.31	0.34	0.32	0.34	0.37	0.33	0.34	0.019	111.9	0.060
Freon 12	0.30	0.32	0.32	0.32	0.34	0.32	0.33	0.33	0.33	0.008	108.6	0.025
Chloromethane	0.30	0.36	0.34	0.35	0.37	0.36	0.36	0.37	0.36	0.011	119.5	0.034
Freon 114	0.30	0.33	0.36	0.35	0.35	0.35	0.36	0.36	0.35	0.011	117.1	0.034
Vinyl Chloride	0.30	0.3	0.3	0.31	0.31	0.32	0.32	0.33	0.31	0.011	104.3	0.035
1,3-butadiene	0.30	0.37	0.39	0.35	0.39	0.37	0.37	0.39	0.38	0.015	125.2	0.048
Bromomethane	0.30	0.35	0.35	0.37	0.36	0.36	0.37	0.38	0.36	0.011	121.0	0.035
Chloroethane	0.30	0.36	0.36	0.35	0.36	0.37	0.34	0.37	0.36	0.011	119.5	0.034
Vinyl Bromide	0.30	0.36	0.37	0.38	0.36	0.38	0.36	0.38	0.37	0.010	123.3	0.031
Freon 11	0.30	0.35	0.37	0.36	0.36	0.36	0.35	0.37	0.36	0.008	120.0	0.026
Acetone	0.30	0.38	0.38	0.36	0.38	0.39	0.38	0.41	0.38	0.015	127.6	0.047
Isopropyl alcohol	0.30	0.29	0.28	0.28	0.27	0.26	0.26	0.27	0.27	0.011	91.0	0.035
1,1-dichloroethene	0.30	0.31	0.34	0.34	0.37	0.35	0.34	0.37	0.35	0.021	115.2	0.065
Freon 113	0.30	0.35	0.36	0.37	0.38	0.36	0.35	0.36	0.36	0.011	120.5	0.034
Methylene chloride	0.30	0.35	0.37	0.36	0.36	0.33	0.35	0.38	0.36	0.016	119.0	0.050
Allyl chloride	0.30	0.39	0.34	0.4	0.37	0.37	0.35	0.4	0.37	0.024	124.8	0.075
Carbon disulfide	0.30	0.38	0.38	0.39	0.39	0.38	0.38	0.4	0.39	0.008	128.6	0.025
trans-1,2-dichloroethene	0.30	0.35	0.36	0.36	0.34	0.36	0.35	0.36	0.35	0.008	118.1	0.025
methyl tert-butyl ether	0.30	0.37	0.34	0.36	0.36	0.35	0.35	0.35	0.35	0.010	118.1	0.031
1,1-dichloroethane	0.30	0.36	0.34	0.35	0.31	0.35	0.38	0.36	0.35	0.022	116.7	0.068
Vinyl acetate	0.30	0.3	0.29	0.28	0.38	0.31	0.33	0.32	0.32	0.033	105.2	0.104
Methyl Ethyl Ketone	0.30	0.28	0.28	0.3	0.27	0.26	0.3	0.27	0.28	0.015	93.3	0.048
cis-1,2-dichloroethene	0.30	0.29	0.3	0.29	0.31	0.3	0.3	0.3	0.30	0.007	99.5	0.022
Hexane	0.30	0.29	0.28	0.29	0.33	0.29	0.29	0.28	0.29	0.017	97.6	0.054
Ethyl acetate	0.30	0.28	0.27	0.28	0.25	0.25	0.31	0.26	0.27	0.021	90.5	0.066
Chloroform	0.30	0.32	0.33	0.34	0.33	0.32	0.33	0.33	0.33	0.007	109.5	0.022
Tetrahydrofuran	0.30	0.34	0.31	0.32	0.29	0.25	0.28	0.32	0.30	0.030	100.5	0.095
1,2-dichloroethane	0.30	0.31	0.31	0.32	0.33	0.31	0.32	0.32	0.32	0.008	105.7	0.024
1,1,1-trichloroethane	0.30	0.34	0.33	0.36	0.33	0.34	0.32	0.35	0.34	0.013	112.9	0.042
Cyclohexane	0.30	0.28	0.3	0.29	0.32	0.3	0.23	0.3	0.29	0.029	96.2	0.090
Carbon tetrachloride	0.30	0.32	0.31	0.33	0.32	0.32	0.3	0.33	0.32	0.011	106.2	0.034
Benzene	0.30	0.29	0.28	0.3	0.29	0.28	0.29	0.3	0.29	0.008	96.7	0.026
1,4-dioxane	0.30	0.27	0.27	0.27	0.27	0.3	0.3	0.3	0.28	0.016	94.3	0.050
2,2,4-trimethylpentane	0.30	0.31	0.31	0.31	0.31	0.32	0.29	0.33	0.31	0.012	103.8	0.038

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Compound	Amount	IDL # 1	IDL # 2	IDL # 3	IDL # 4	IDL # 5	IDL # 6	IDL # 7	Avg	Stdev	%Rec	IDL
Heptane	0.30	0.32	0.3	0.33	0.28	0.3	0.3	0.37	0.31	0.029	104.8	0.092
Trichloroethene	0.30	0.28	0.28	0.29	0.28	0.28	0.28	0.29	0.28	0.005	94.3	0.015
1,2-dichloropropane	0.30	0.31	0.3	0.33	0.31	0.31	0.29	0.31	0.31	0.012	102.9	0.038
Bromodichloromethane	0.30	0.36	0.36	0.38	0.37	0.36	0.35	0.37	0.36	0.010	121.4	0.031
cis-1,3-dichloropropene	0.30	0.27	0.29	0.28	0.26	0.26	0.27	0.28	0.27	0.011	91.0	0.035
trans-1,3-dichloropropen	0.30	0.32	0.29	0.31	0.32	0.32	0.29	0.31	0.31	0.013	102.9	0.042
1,1,2-trichloroethane	0.30	0.32	0.31	0.34	0.32	0.32	0.31	0.33	0.32	0.011	107.1	0.034
Toluene	0.30	0.29	0.31	0.29	0.28	0.28	0.29	0.28	0.29	0.011	96.2	0.034
Methyl Isobutyl Ketone	0.30	0.35	0.3	0.27	0.28	0.33	0.27	0.27	0.30	0.033	98.6	0.102
Dibromochloromethane	0.30	0.39	0.41	0.41	0.4	0.41	0.39	0.43	0.41	0.014	135.2	0.044
Methyl Butyl Ketone	0.30	0.3	0.26	0.28	0.26	0.27	0.3	0.27	0.28	0.017	92.4	0.054
1,2-dibromoethane	0.30	0.3	0.34	0.34	0.33	0.33	0.31	0.34	0.33	0.016	109.0	0.050
Tetrachloroethylene	0.30	0.33	0.36	0.35	0.33	0.34	0.32	0.34	0.34	0.013	112.9	0.042
Chlorobenzene	0.30	0.31	0.34	0.32	0.33	0.32	0.32	0.33	0.32	0.010	108.1	0.031
Ethylbenzene	0.30	0.28	0.31	0.3	0.29	0.3	0.29	0.29	0.29	0.010	98.1	0.031
m&p-xylene	0.60	0.48	0.54	0.52	0.51	0.5	0.51	0.52	0.51	0.019	85.2	0.059
Styrene	0.30	0.3	0.31	0.3	0.3	0.29	0.29	0.3	0.30	0.007	99.5	0.022
Bromoform	0.30	0.42	0.43	0.42	0.41	0.42	0.4	0.43	0.42	0.011	139.5	0.034
o-xylene	0.30	0.29	0.31	0.24	0.31	0.31	0.29	0.3	0.29	0.025	97.6	0.079
Bromofluorobenzene	1.00	0.86	0.89	0.85	0.87	0.82	0.87	0.85	0.86	0.022	85.9	0.069
1,1,2,2-tetrachloroethane	0.30	0.33	0.33	0.34	0.33	0.34	0.32	0.33	0.33	0.007	110.5	0.022
4-ethyltoluene	0.30	0.34	0.37	0.36	0.35	0.35	0.35	0.35	0.35	0.010	117.6	0.030
1,3,5-trimethylbenzene	0.30	0.25	0.26	0.26	0.26	0.26	0.25	0.24	0.25	0.008	84.8	0.025
1,2,4-trimethylbenzene	0.30	0.27	0.28	0.28	0.28	0.26	0.28	0.28	0.28	0.008	91.9	0.025
1,3-dichlorobenzene	0.30	0.27	0.28	0.29	0.26	0.27	0.26	0.27	0.27	0.011	90.5	0.034
benzyl chloride	0.30	0.31	0.32	0.33	0.32	0.31	0.33	0.34	0.32	0.011	107.6	0.035
1,4-dichlorobenzene	0.30	0.25	0.26	0.26	0.25	0.25	0.24	0.26	0.25	0.008	84.3	0.024
1,2-dichlorobenzene	0.30	0.25	0.26	0.27	0.26	0.25	0.26	0.28	0.26	0.011	87.1	0.034
1,2,4-trichlorobenzene	0.30	0.26	0.29	0.28	0.26	0.28	0.26	0.27	0.27	0.012	90.5	0.038
Naphthalene	0.30	0.22	0.23	0.23	0.23	0.21	0.22	0.22	0.22	0.008	74.3	0.024
Hexachloro-1,3-butadien	0.30	0.29	0.3	0.3	0.28	0.3	0.29	0.3	0.29	0.008	98.1	0.025

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Compound	Amount	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	Avg	Stdev	%Rec	IDL
Vinyl Chloride	0.10	0.12	0.11	0.12	0.11	0.11	0.12	0.12	0.12	0.005	115.7	0.017
1,1-dichloroethene	0.10	0.12	0.12	0.13	0.13	0.13	0.12	0.12	0.12	0.005	124.3	0.017
Methylene chloride	0.10	0.11	0.13	0.13	0.11	0.12	0.12	0.12	0.12	0.008	120.0	0.026
trans-1,2-dichloroethene	0.10	0.11	0.13	0.11	0.1	0.11	0.11	0.09	0.11	0.012	108.6	0.038
1,1-dichloroethane	0.10	0.11	0.13	0.11	0.12	0.11	0.12	0.12	0.12	0.008	117.1	0.024
cis-1,2-dichloroethene	0.10	0.09	0.11	0.11	0.09	0.09	0.09	0.1	0.10	0.010	97.1	0.030
1,2-dichloroethane	0.10	0.1	0.11	0.12	0.11	0.1	0.11	0.11	0.11	0.007	108.6	0.022
1,1,1-trichloroethane	0.10	0.11	0.11	0.11	0.12	0.11	0.09	0.1	0.11	0.010	107.1	0.030
Carbon tetrachloride	0.10	0.11	0.1	0.1	0.11	0.09	0.1	0.1	0.10	0.007	101.4	0.022
Benzene	0.10	0.09	0.11	0.09	0.09	0.1	0.09	0.09	0.09	0.008	94.3	0.025
Trichloroethene	0.10	0.09	0.09	0.09	0.1	0.1	0.09	0.1	0.09	0.005	94.3	0.017
1,1,2-trichloroethane	0.10	0.11	0.09	0.09	0.11	0.09	0.11	0.1	0.10	0.010	100.0	0.031
Tetrachloroethylene	0.10	0.12	0.12	0.13	0.12	0.11	0.11	0.11	0.12	0.008	117.1	0.024
Bromofluorobenzene	1.00	0.79	0.84	0.82	0.82	0.82	0.82	0.81	0.82	0.015	81.7	0.047

GC/MS-Whole Air Calculations

Relative Response Factor (RRF)

$$RRF = \frac{Ax * Cis}{Ais * Cx}$$

where: Ax = area of the characteristic ion for the compound being measured
Ais = area of the characteristic ion for the specific internal standard of the compound being measured
Cx = concentration of the compound being measured (ppbv)
Cis = concentration of the internal standard (ppbv)

Percent Relative Standard Deviation (%RSD)

$$\% RSD = \frac{\text{Standard deviation of RRF values} * 100}{\text{mean RRF}}$$

Percent Difference (%D)

$$\% D = \frac{(RRFc - \text{mean RRFi}) * 100}{\text{mean RRFi}}$$

where: RRFc = relative response factor from the continuing calibration
mean RRFi = mean relative response factor from the initial calibration

Sample Calculations

$$ppbv = \frac{Ax * Is * Df}{Ais * RRF}$$

where: Ax = area of the characteristic ion for the compound being measured
Ais = area of the characteristic ion for the specific internal standard of the compound being measured
Is = Concentration of the internal standard injected (ppbv)
RRF= relative response factor for the compound being measured
Df = Dilution factor

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

SAMPLE DATA

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab's Vacuum Reading	-18			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		TO-15				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.24	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/4/2009
Acetone	3.7	0.30		ppbV	1	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	0.20	0.15		ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	< 0.15	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	0.30	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	0.84	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.21	0.15		ppbV	1	12/4/2009
Freon 113	< 0.15	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.41	0.15		ppbV	1	12/4/2009
Heptane	0.15	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	< 0.15	0.15		ppbV	1	12/4/2009
Isopropyl alcohol	1.5	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.21	0.30	J	ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	0.15	0.30	J	ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	0.43	0.15		ppbV	1	12/4/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.21	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.38	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	1.6	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	94.0	70-130		%REC	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	1.2	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	< 0.75	0.75		ug/m3	1	12/4/2009
Acetone	9.0	0.72		ug/m3	1	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	0.65	0.49		ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	0.63	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	3.4	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/4/2009
Freon 11	1.2	0.86		ug/m3	1	12/4/2009
Freon 113	< 1.2	1.2		ug/m3	1	12/4/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limi

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	0.62	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	< 0.54	0.54		ug/m3	1	12/4/2009
Isopropyl alcohol	3.7	0.37		ug/m3	1	12/4/2009
m&p-Xylene	0.93	1.3	J	ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	0.45	0.90	J	ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	1.5	0.53		ug/m3	1	12/4/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	1.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	1.5	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	8.6	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120426.D Vial: 4
Acq On : 5 Dec 2009 00:05 Operator: RJP
Sample : C0912007-001A Inst : MSD #1
Misc : C0912007-001A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 05 00:27:13 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

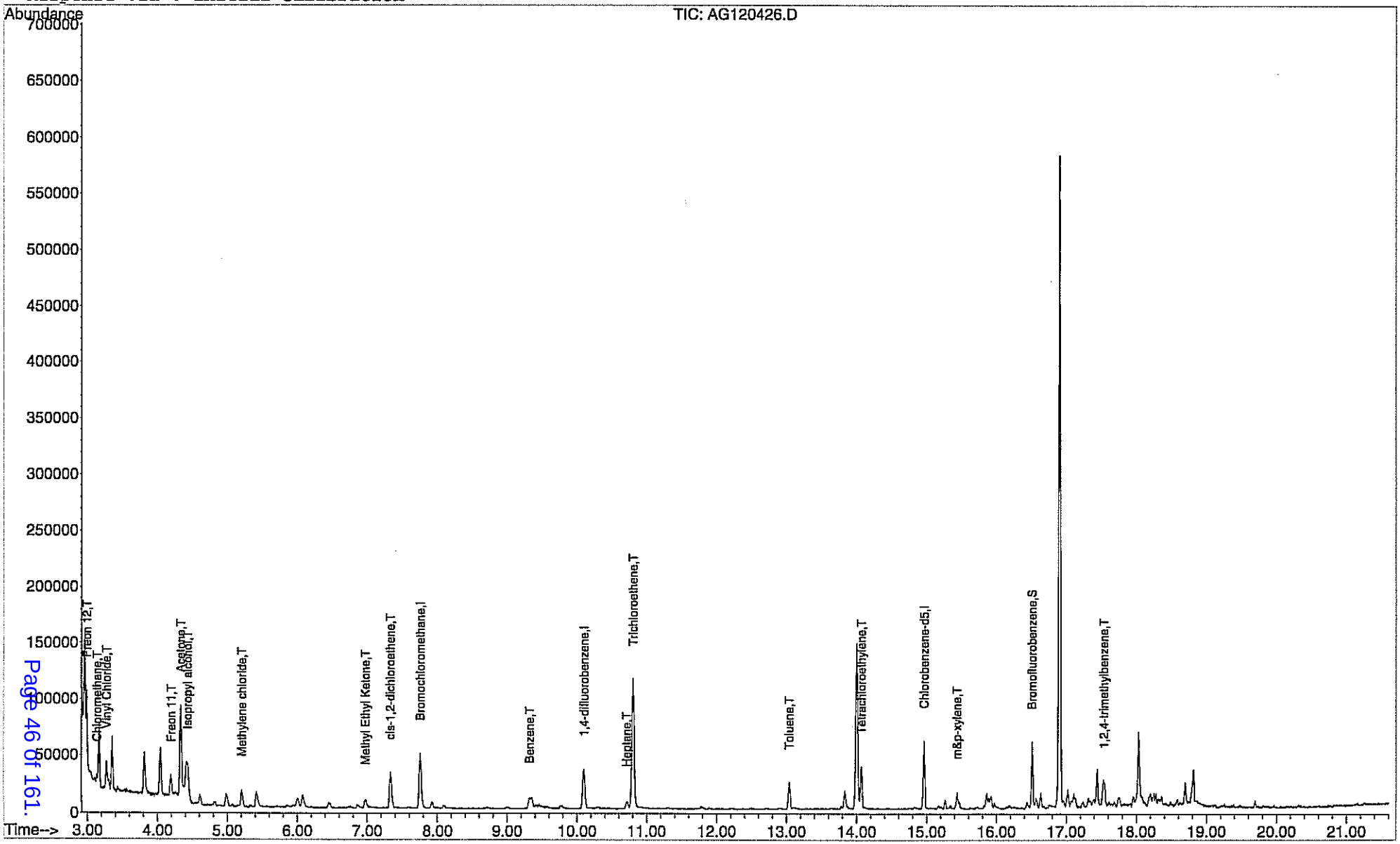
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17510	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	34976	1.00	ppb		0.00
44) Chlorobenzene-d5	14.95	117	32287	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	13942	0.94	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 94.00%				
Target Compounds							Qvalue
3) Freon 12	3.00	85	37382	0.41	ppb		97
4) Chloromethane	3.14	50	5815	0.30	ppb		91
6) Vinyl Chloride	3.28	62	1106	0.06	ppb		87
11) Freon 11	4.20	101	13155	0.21	ppb		99
12) Acetone	4.34	58	22554m	3.72	ppb		
13) Isopropyl alcohol	4.44	45	24485	1.48	ppb	#	100
16) Methylene chloride	5.21	84	7455	0.43	ppb	#	80
23) Methyl Ethyl Ketone	6.98	43	4327	0.15	ppb		94
24) cis-1,2-dichloroethene	7.33	61	17391	0.84	ppb		97
34) Benzene	9.32	78	8538	0.20	ppb		92
37) Heptane	10.72	43	1641	0.15	ppb		82
38) Trichloroethene	10.80	130	49427	1.57	ppb		98
45) Toluene	13.04	92	9438	0.38	ppb		99
50) Tetrachloroethylene	14.06	164	7306	0.21	ppb		99
53) m&p-xylene	15.43	91	8894	0.21	ppb		98
61) 1,2,4-trimethylbenzene	17.54	105	6561	0.24	ppb		95

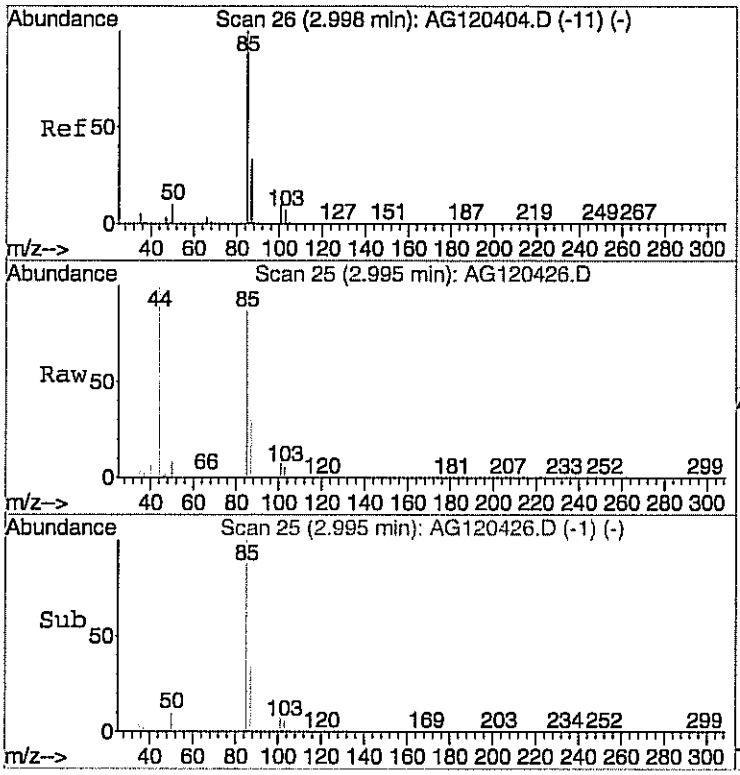
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120426.D Vial: 4
Acq On : 5 Dec 2009 00:05 Operator: RJP
Sample : C0912007-001A Inst : MSD #1
Misc : C0912007-001A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:05 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration

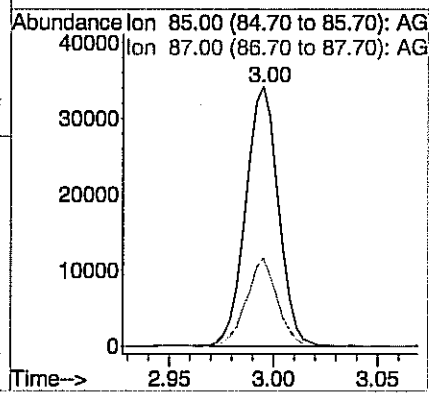


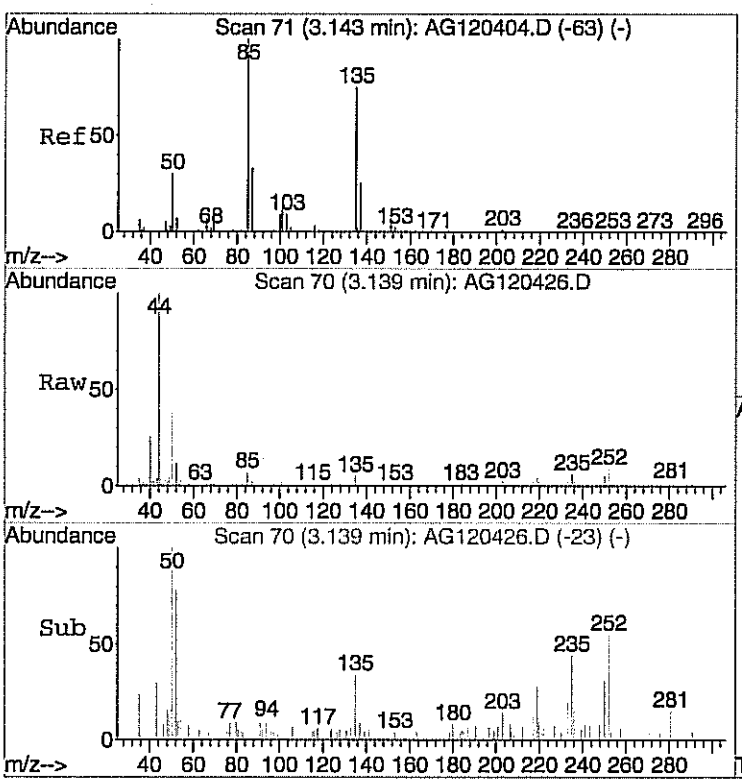


#3
Freon 12
Concen: 0.41 ppb
RT: 3.00 min Scan# 25
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 85 Resp: 37382

Ion	Ratio	Lower	Upper
85	100		
87	32.0	13.6	53.6

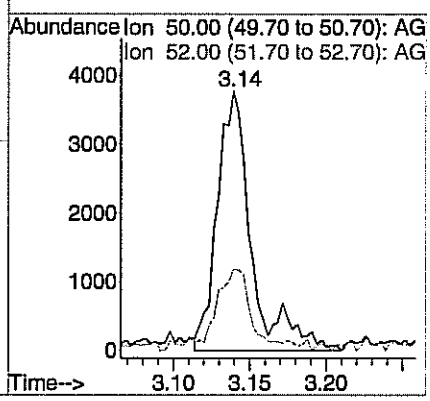


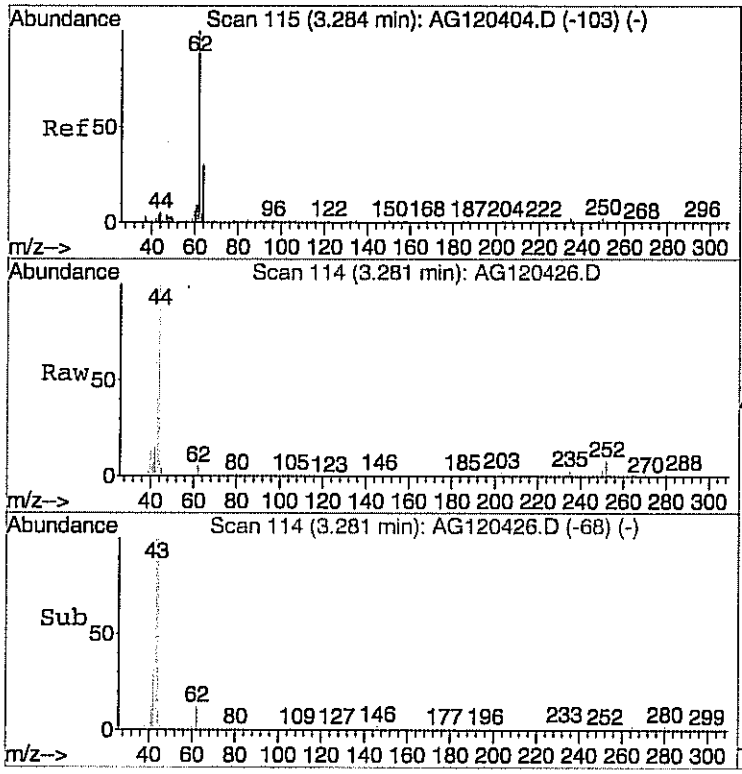


#4
Chloromethane
Concen: 0.30 ppb
RT: 3.14 min Scan# 70
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 50 Resp: 5815

Ion	Ratio	Lower	Upper
50	100		
52	31.8	7.3	47.3

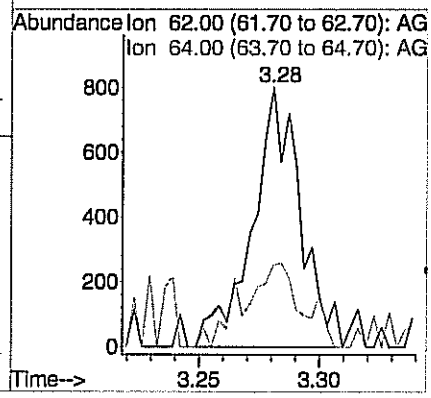


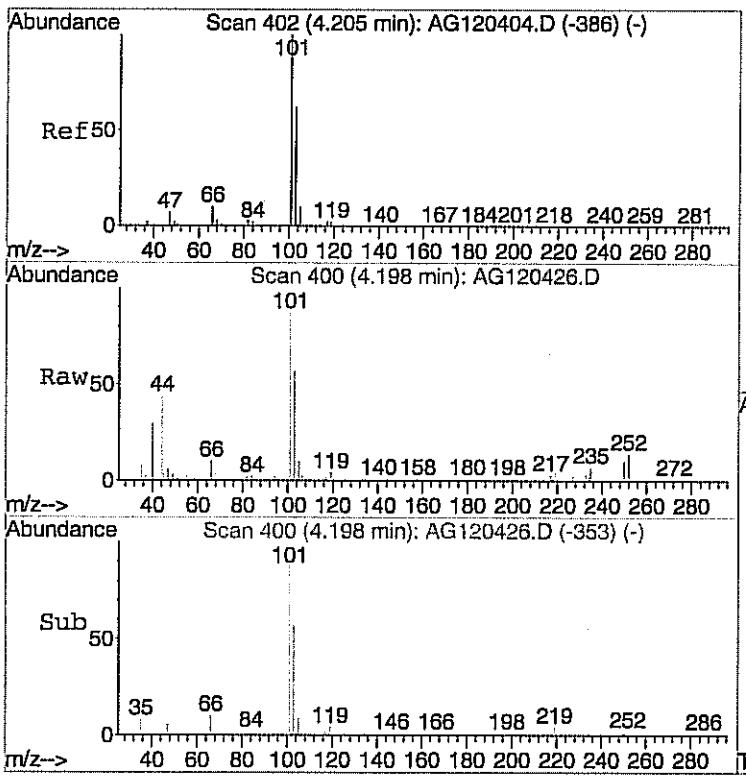


#6
Vinyl Chloride
Concen: 0.06 ppb
RT: 3.28 min Scan# 114
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 62 Resp: 1106

Ion	Ratio	Lower	Upper
62	100		
64	39.4	2.3	62.3

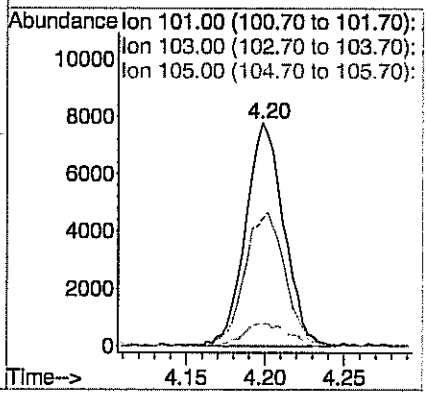


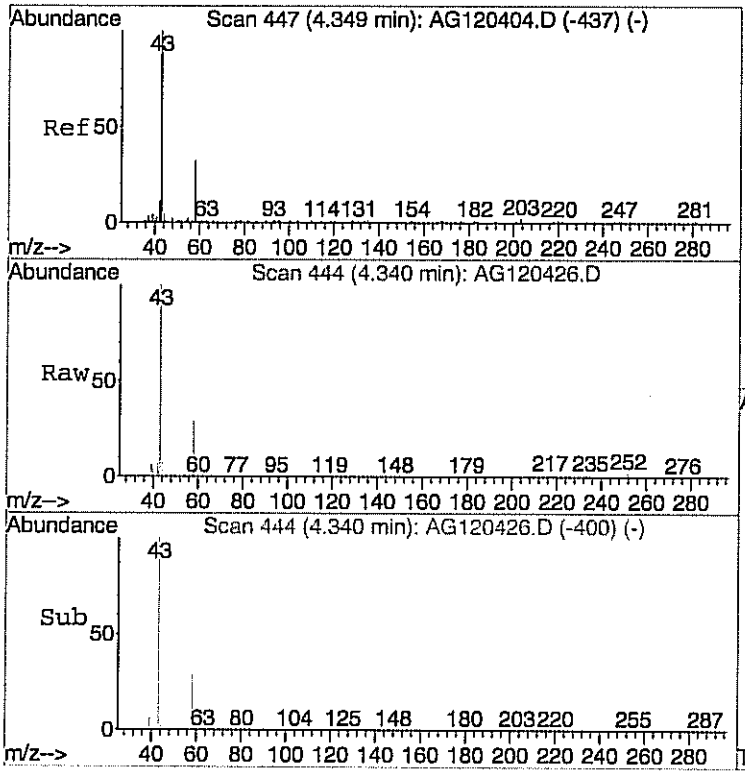


#11
Freon 11
Concen: 0.21 ppb
RT: 4.20 min Scan# 400
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion:101 Resp: 13155

Ion	Ratio	Lower	Upper
101	100		
103	63.1	44.1	84.1
105	11.8	0.0	31.1

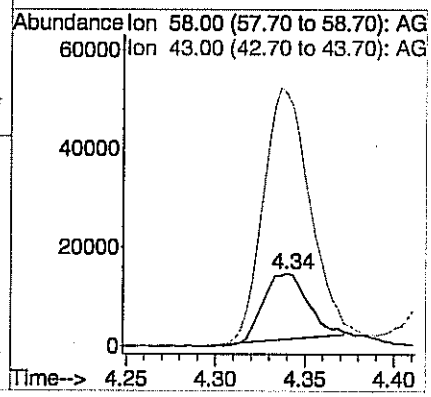


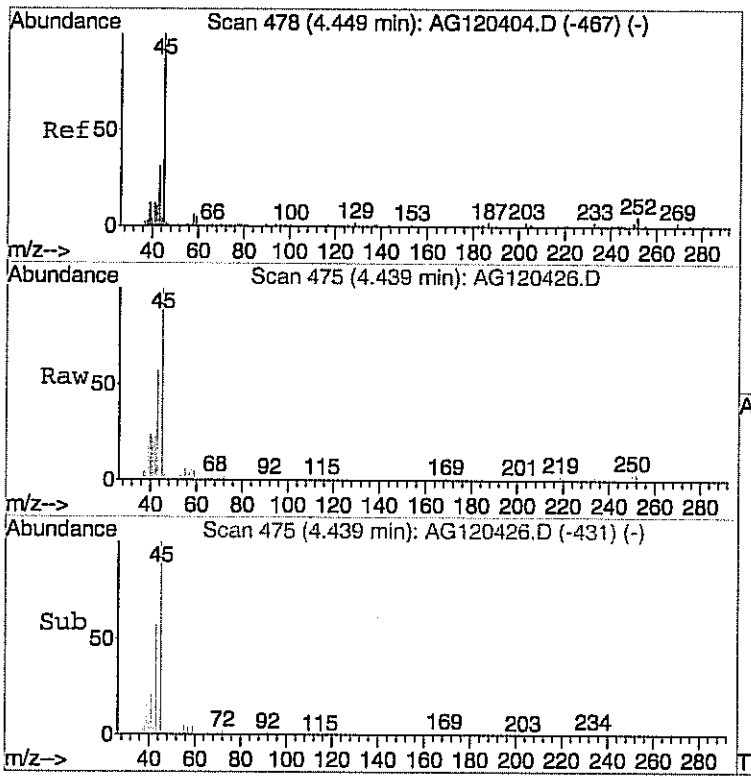


#12
Acetone
Concen: 3.72 ppb m
RT: 4.34 min Scan# 444
Delta R.T. -0.01 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 58 Resp: 22554

Ion	Ratio	Lower	Upper
58	100		
43	552.9	398.6	458.6#

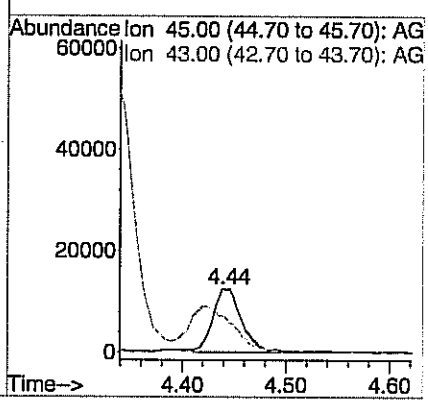


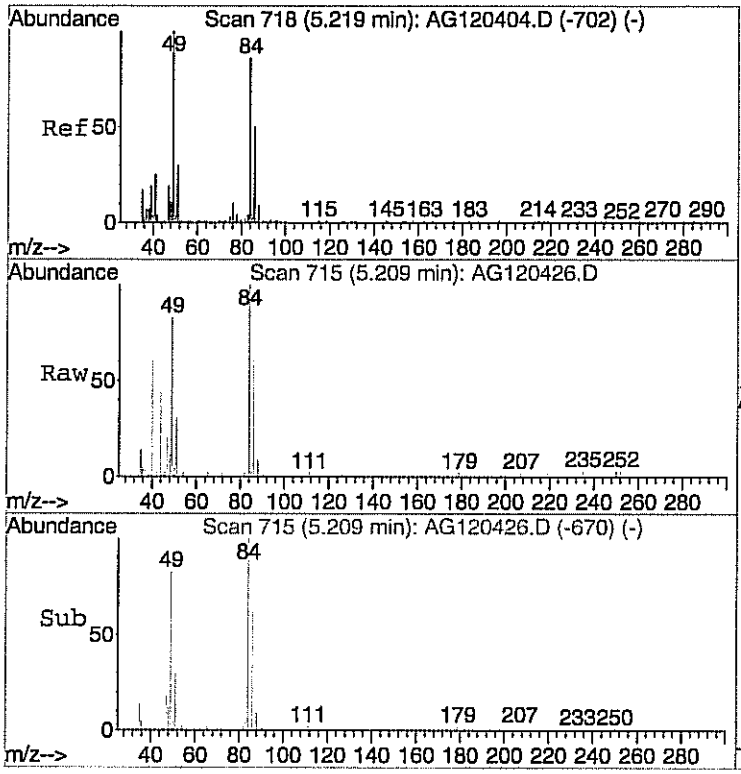


#13
Isopropyl alcohol
Concen: 1.48 ppb
RT: 4.44 min Scan# 475
Delta R.T. -0.01 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 45 Resp: 24485

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	20.0

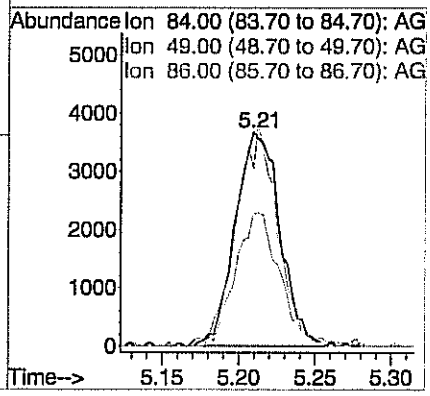


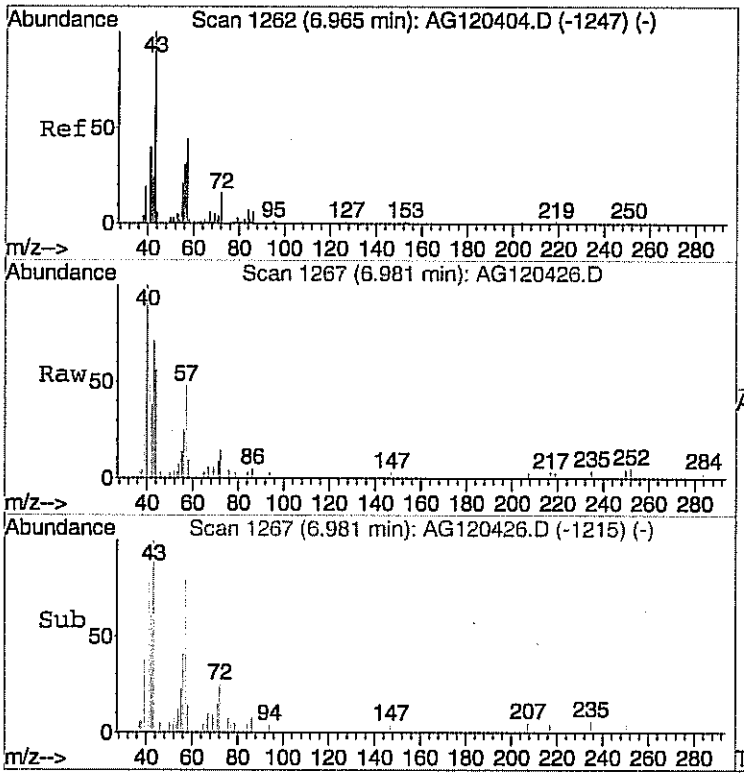


#16
Methylene chloride
Concen: 0.43 ppb
RT: 5.21 min Scan# 715
Delta R.T. -0.01 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 84 Resp: 7455

Ion	Ratio	Lower	Upper
84	100		
49	96.1	106.2	146.2#
86	60.9	47.2	87.2

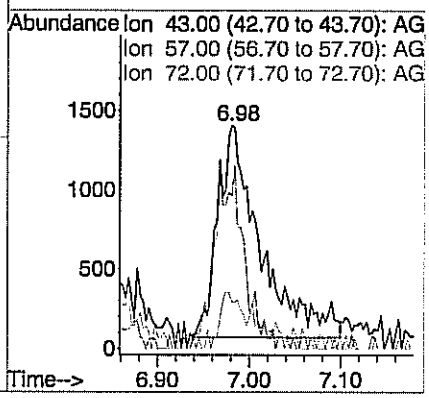


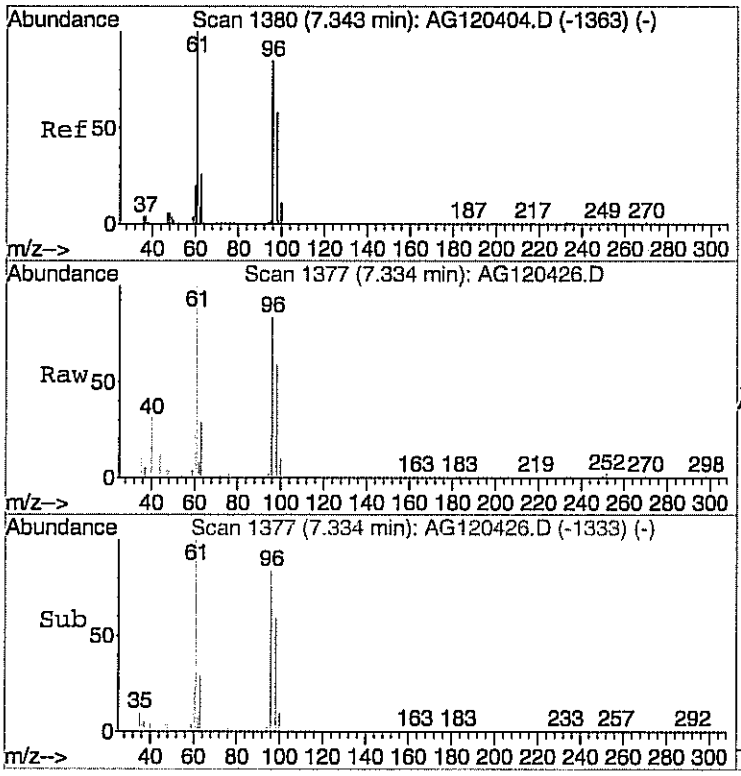


#23
Methyl Ethyl Ketone
Concen: 0.15 ppb
RT: 6.98 min Scan# 1267
Delta R.T. 0.02 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 43 Resp: 4327

Ion	Ratio	Lower	Upper
43	100		
57	58.1	34.3	74.3
72	20.3	0.0	37.4

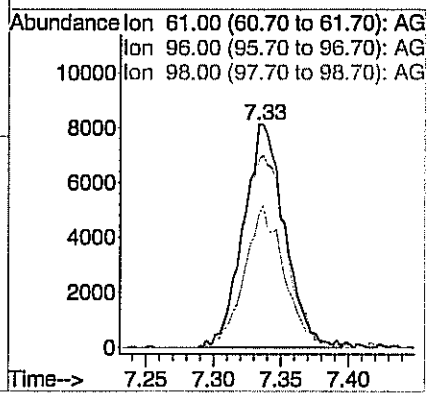


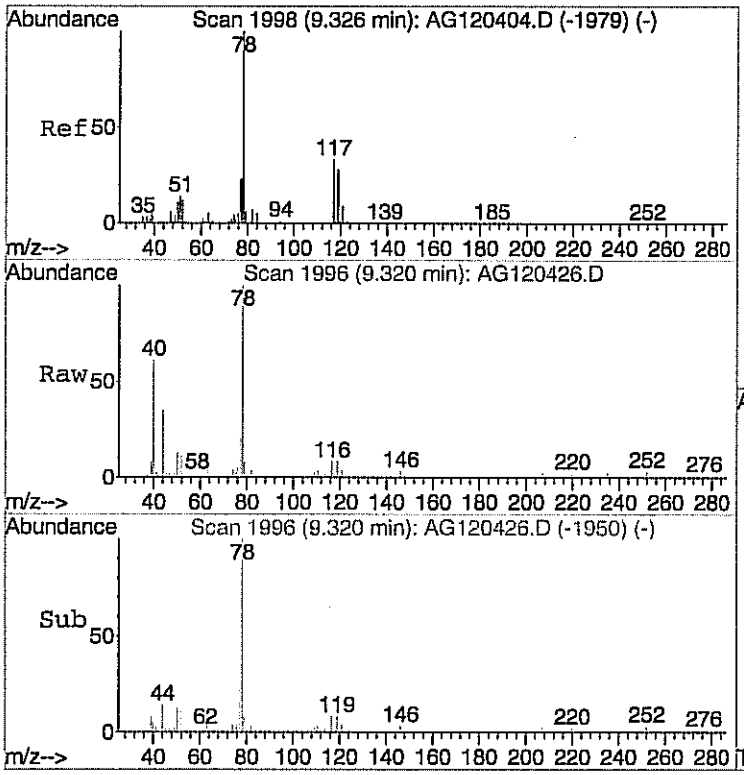


#24
cis-1,2-dichloroethene
Concen: 0.84 ppb
RT: 7.33 min Scan# 1377
Delta R.T. -0.01 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 61 Resp: 17391

Ion	Ratio	Lower	Upper
61	100		
96	92.5	70.4	110.4
98	61.0	37.5	77.5

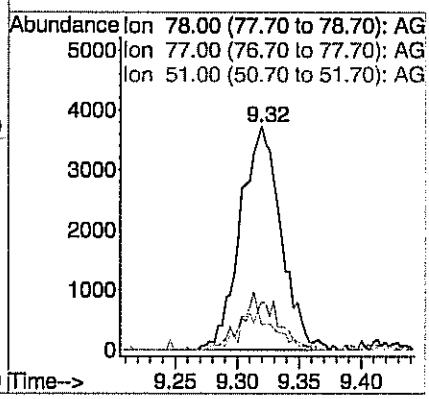


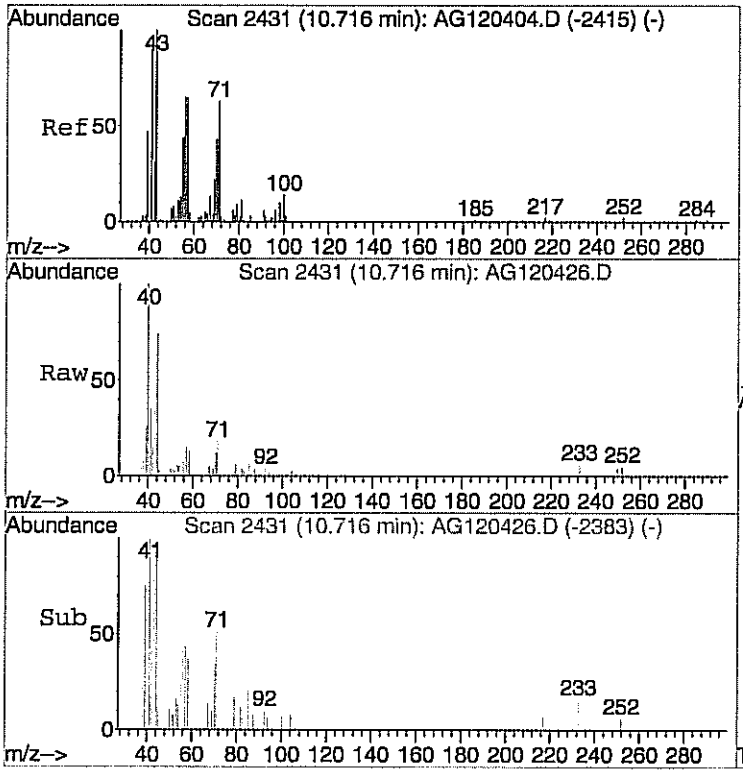


#34
Benzene
Concen: 0.20 ppb
RT: 9.32 min Scan# 1996
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 78 Resp: 8538

Ion	Ratio	Lower	Upper
78	100		
77	22.6	9.2	49.2
51	15.0	0.0	35.4

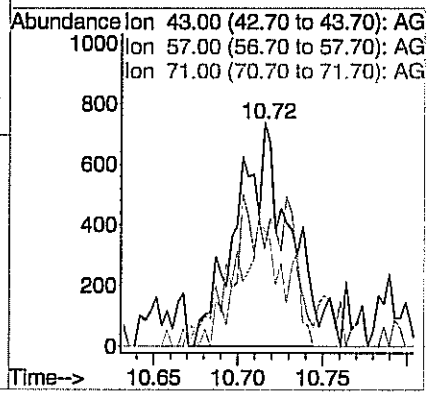


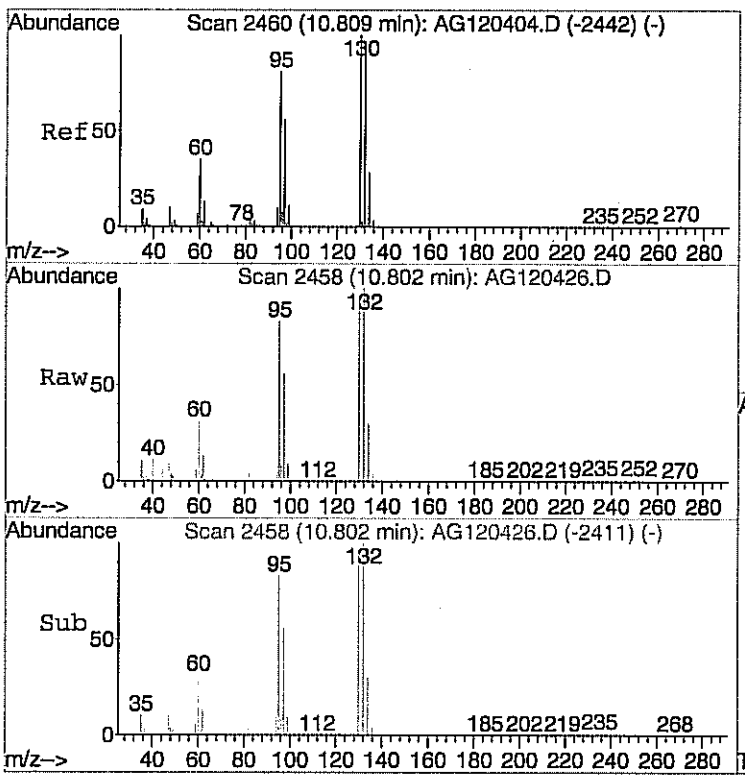


#37
Heptane
Concen: 0.15 ppb
RT: 10.72 min Scan# 2431
Delta R.T. 0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 43 Resp: 1641

Ion	Ratio	Lower	Upper
43	100		
57	70.2	37.2	77.2
71	49.1	43.4	83.4

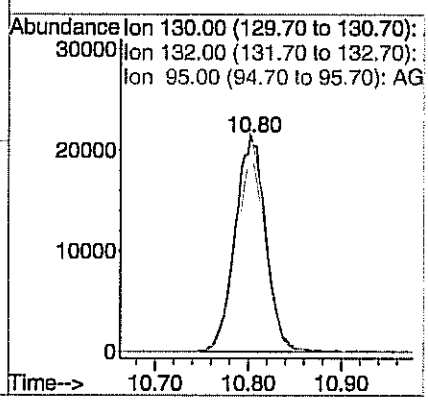


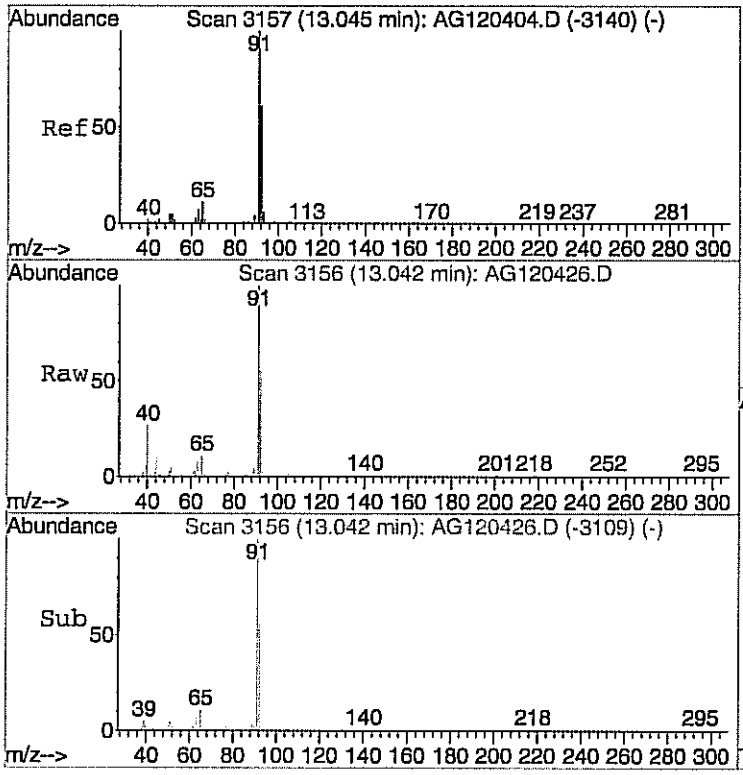


#38
Trichloroethene
Concen: 1.57 ppb
RT: 10.80 min Scan# 2458
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion:130 Resp: 49427

Ion	Ratio	Lower	Upper
130	100		
132	97.8	77.3	117.3
95	87.7	71.1	111.1

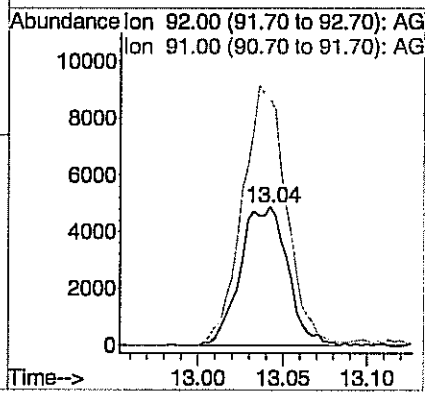


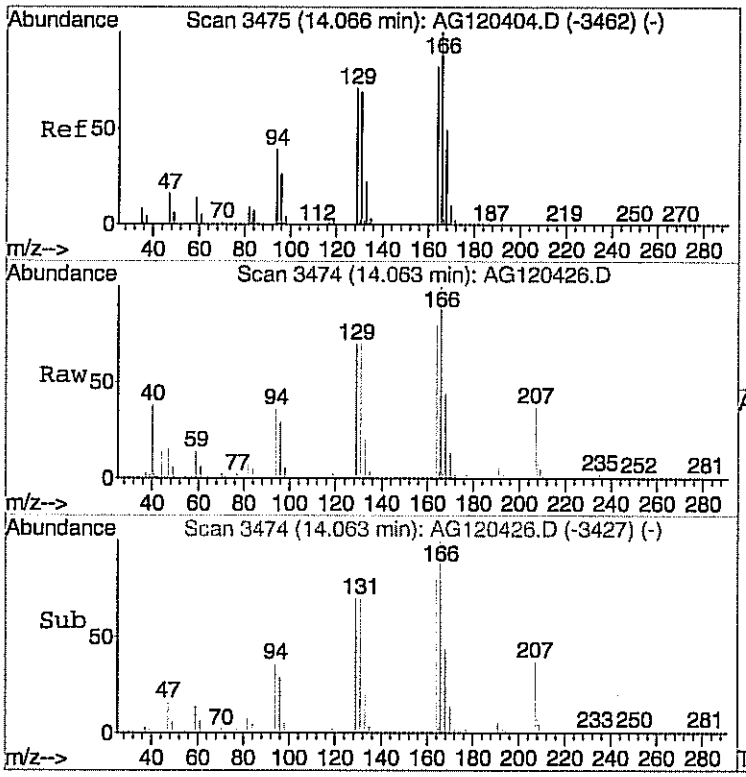


#45
Toluene
Concen: 0.38 ppb
RT: 13.04 min Scan# 3156
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 92 Resp: 9438

Ion	Ratio	Lower	Upper
92	100		
91	178.6	157.6	197.6

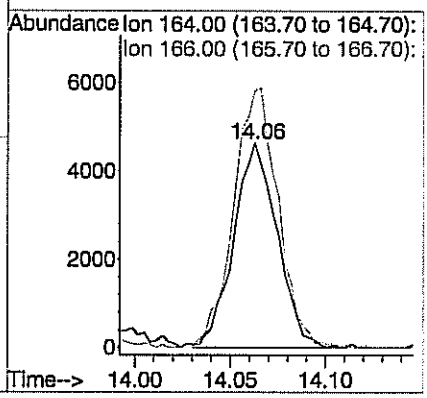


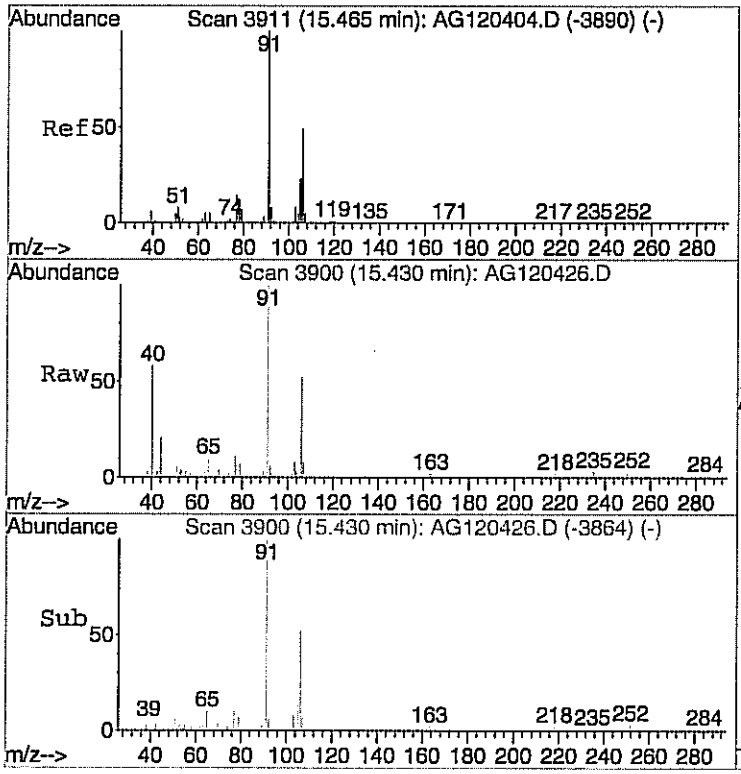


#50
Tetrachloroethylene
Concen: 0.21 ppb
RT: 14.06 min Scan# 3474
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion:164 Resp: 7306

Ion	Ratio	Lower	Upper
164	100		
166	130.1	109.0	149.0

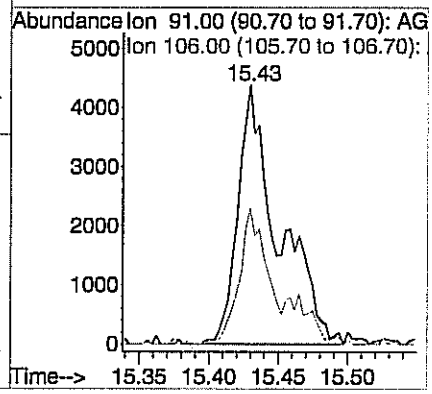


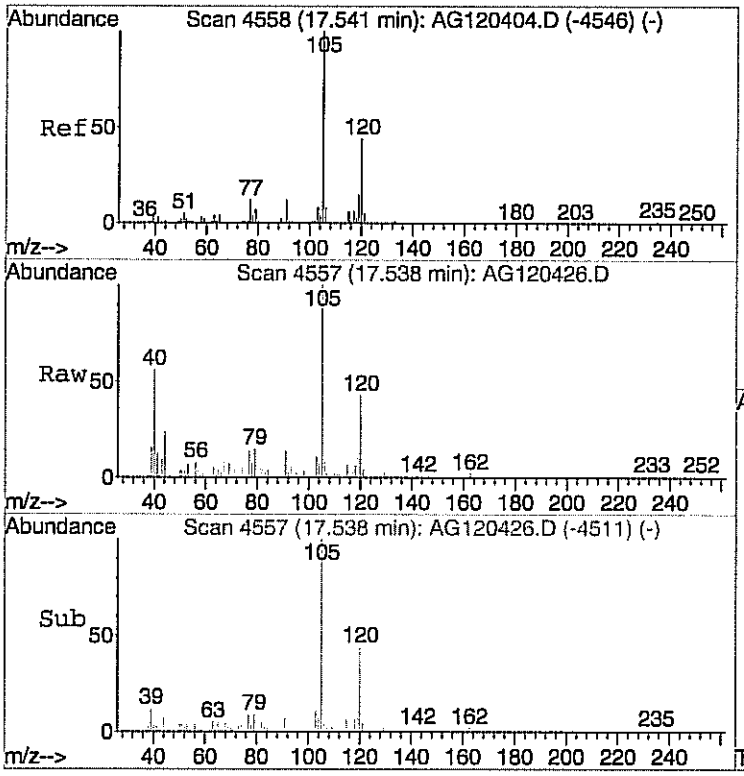


#53
m&p-xylene
Concen: 0.21 ppb
RT: 15.43 min Scan# 3900
Delta R.T. -0.04 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion: 91 Resp: 8894

Ion	Ratio	Lower	Upper
91	100		
106	47.6	29.0	69.0

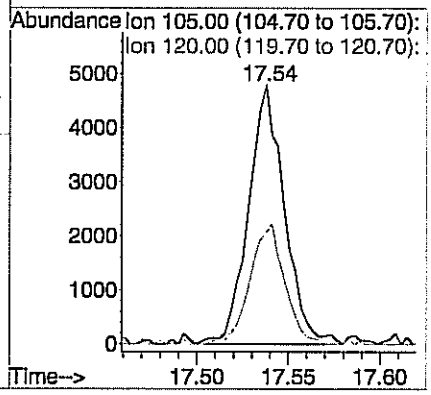




#61
1,2,4-trimethylbenzene
Concen: 0.24 ppb
RT: 17.54 min Scan# 4557
Delta R.T. -0.00 min
Lab File: AG120426.D
Acq: 5 Dec 2009 00:05

Tgt Ion:105 Resp: 6561

Ion	Ratio	Lower	Upper
105	100		
120	44.3	27.4	67.4



Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab's Vacuum Reading	-4			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		TO-15				Analyst: **RJP**
1,1,1-Trichloroethane	3.6	1.5		ppbV	10	12/4/2009
1,1,1-Trichloroethane	3.4	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.60	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	0.13	0.15	J	ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	0.24	0.15		ppbV	1	12/4/2009
Acetone	6.7	3.0		ppbV	10	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	0.12	0.15	J	ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	0.55	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.22	0.15		ppbV	1	12/4/2009
Freon 11	0.17	0.15		ppbV	1	12/4/2009
Freon 113	0.20	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.42	0.15		ppbV	1	12/4/2009
Heptane	0.18	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	0.14	0.15	J	ppbV	1	12/4/2009
Isopropyl alcohol	0.52	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.70	0.30		ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	0.17	0.30	J	ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	< 0.15	0.15		ppbV	1	12/4/2009
o-Xylene	0.22	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.78	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.58	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	0.39	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	20	8.3		ug/m3	10	12/4/2009
1,1,1-Trichloroethane	19	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	3.0	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	0.65	0.75	J	ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	1.2	0.75		ug/m3	1	12/4/2009
Acetone	16	7.2		ug/m3	10	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	0.39	0.49	J	ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	1.7	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	< 0.31	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	0.97	0.66		ug/m3	1	12/4/2009
Freon 11	0.97	0.86		ug/m3	1	12/4/2009
Freon 113	1.6	1.2		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	0.75	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	0.50	0.54	J	ug/m3	1	12/4/2009
Isopropyl alcohol	1.3	0.37		ug/m3	1	12/4/2009
m&p-Xylene	3.1	1.3		ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	0.51	0.90	J	ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	< 0.53	0.53		ug/m3	1	12/4/2009
o-Xylene	0.97	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	5.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	2.2	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	2.1	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120427.D Vial: 5
Acq On : 5 Dec 2009 00:37 Operator: RJP
Sample : C0912007-002A Inst : MSD #1
Misc : C0912007-002A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 05 00:59:29 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

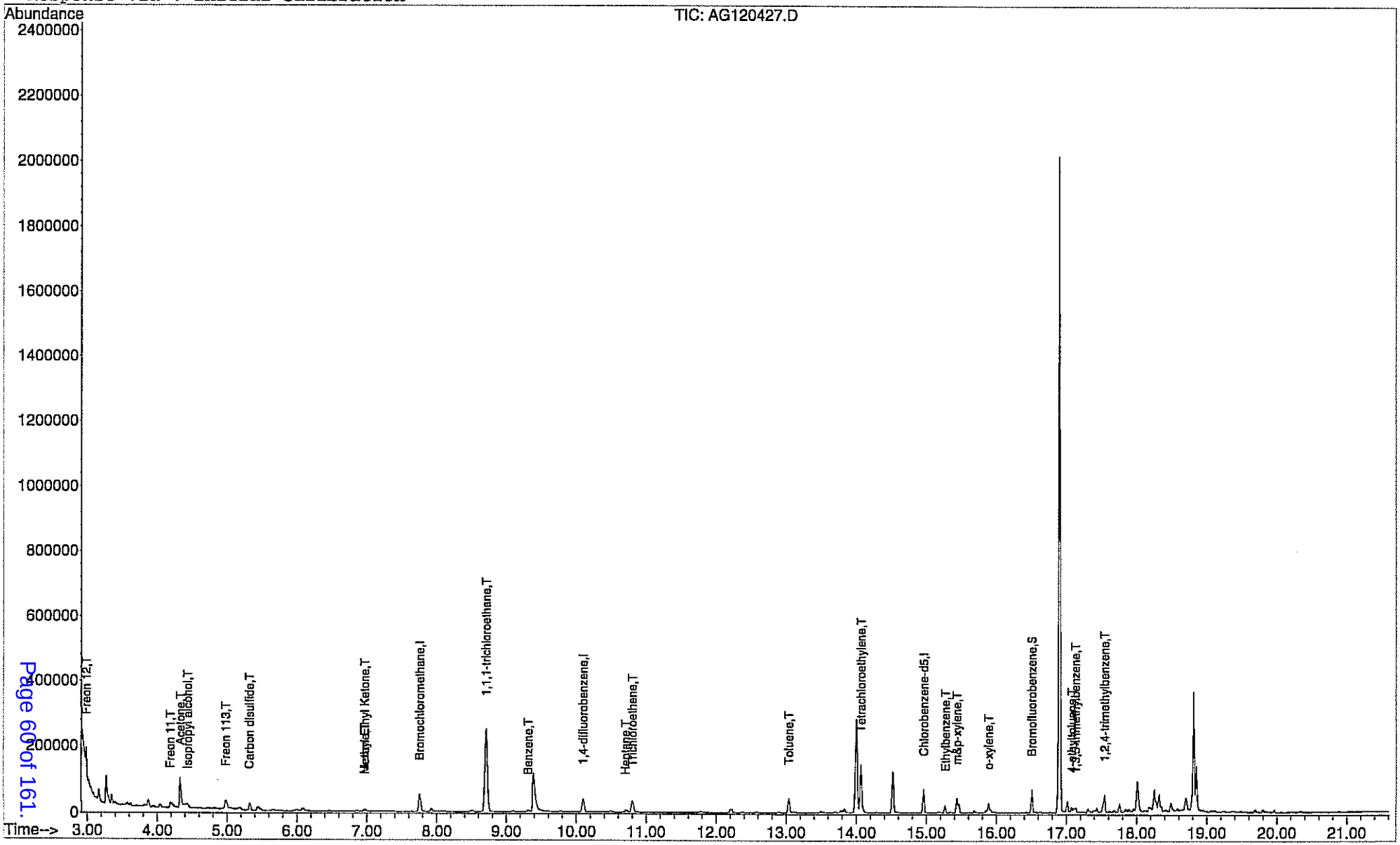
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	18000	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	38176	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	39090	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	16540	0.92	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 92.00%				
Target Compounds							Qvalue
3) Freon 12	2.99	85	38530	0.42	ppb		98
11) Freon 11	4.19	101	11208	0.17	ppb		98
12) Acetone	4.33	58	31215	5.01	ppb	#	69
13) Isopropyl alcohol	4.44	45	8872	0.52	ppb	#	100
15) Freon 113	4.99	101	9427	0.20	ppb		96
18) Carbon disulfide	5.33	76	31483	0.55	ppb		98
23) Methyl Ethyl Ketone	6.96	43	5050	0.17	ppb		80
25) Hexane	6.98	41	2037	0.14	ppb	#	76
31) 1,1,1-trichloroethane	8.71	97	204553	3.44	ppb		100
34) Benzene	9.32	78	5301	0.12	ppb		94
37) Heptane	10.72	43	2176	0.18	ppb		87
38) Trichloroethene	10.80	130	13414	0.39	ppb		97
45) Toluene	13.04	92	17318	0.58	ppb		99
50) Tetrachloroethylene	14.06	164	32913	0.78	ppb		96
52) Ethylbenzene	15.27	91	12253	0.22	ppb		100
53) m&p-xylene	15.43	91	35359	0.70	ppb		99
56) o-xylene	15.89	91	13643	0.22	ppb		99
59) 4-ethyltoluene	17.07	105	8473m	0.24	ppb		
60) 1,3,5-trimethylbenzene	17.13	105	6198m	0.13	ppb		
61) 1,2,4-trimethylbenzene	17.54	105	20369	0.60	ppb		99

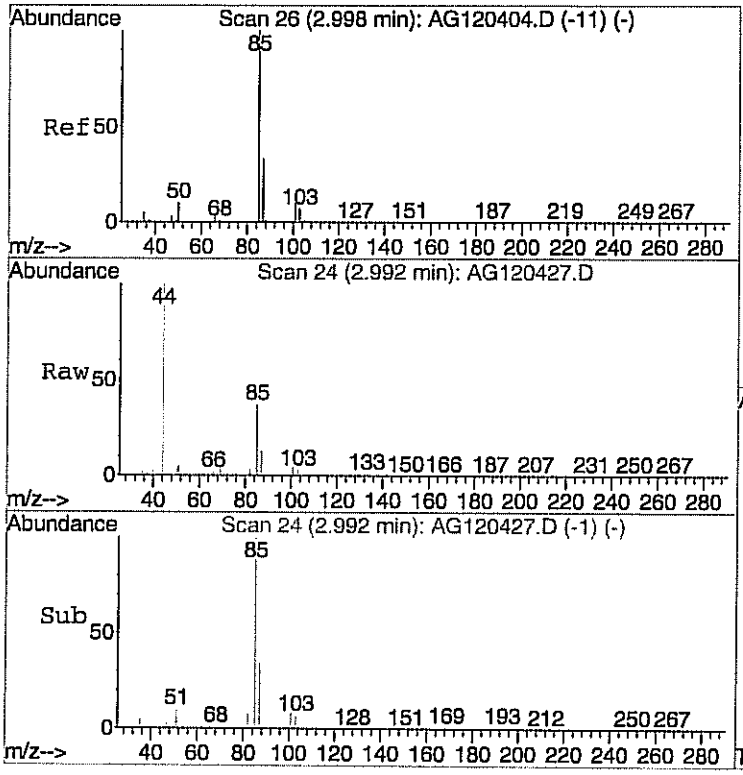
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120427.D Vial: 5
Acq On : 5 Dec 2009 00:37 Operator: RJP
Sample : C0912007-002A Inst : MSD #1
Misc : C0912007-002A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:04 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration

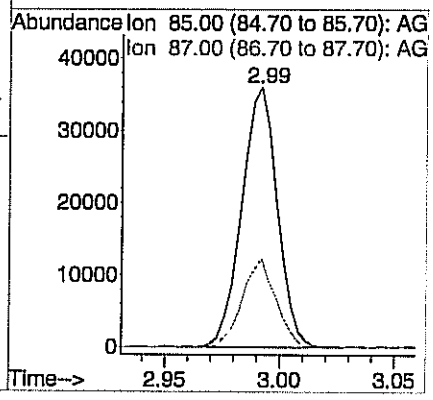


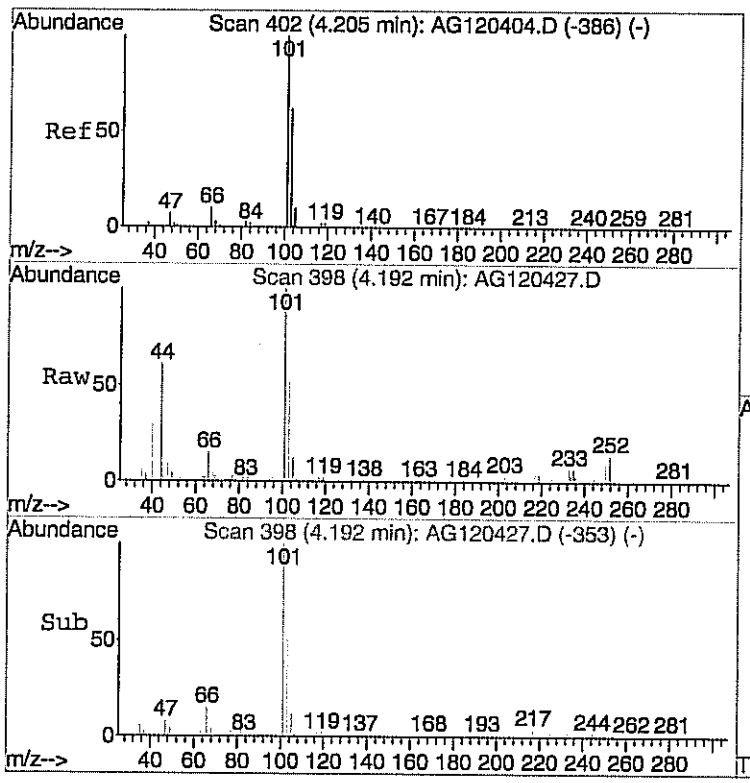


#3
Freon 12
Concen: 0.42 ppb
RT: 2.99 min Scan# 24
Delta R.T. -0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 85 Resp: 38530

Ion	Ratio	Lower	Upper
85	100		
87	32.4	13.6	53.6

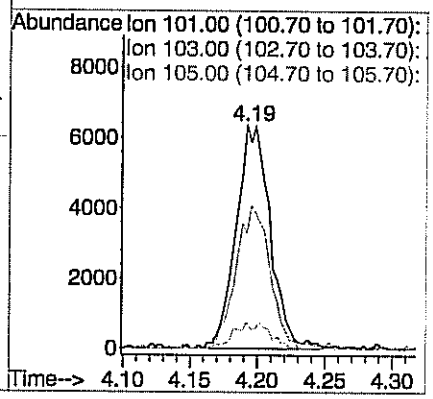


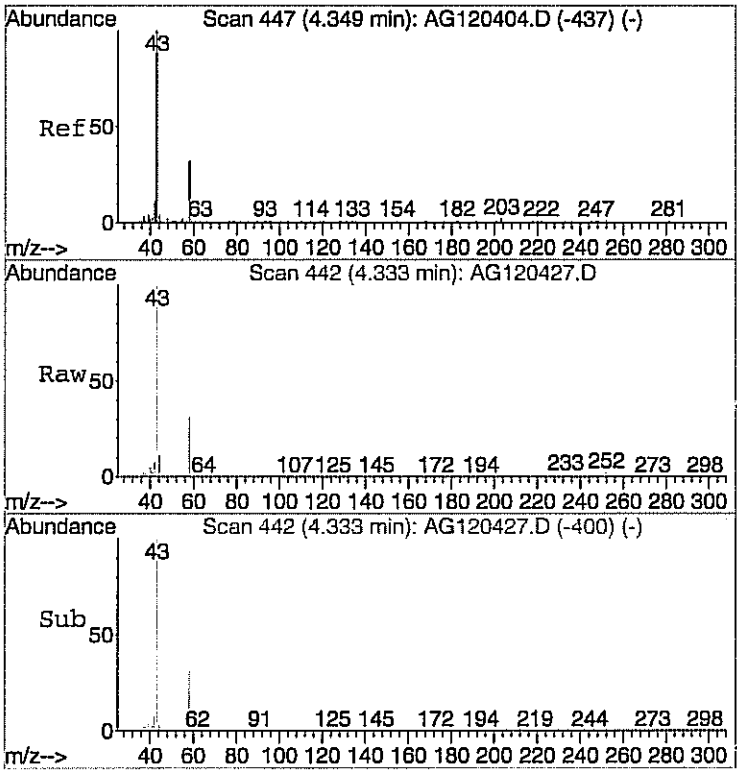


#11
Freon 11
Concen: 0.17 ppb
RT: 4.19 min Scan# 398
Delta R.T. -0.01 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion:101 Resp: 11208

Ion	Ratio	Lower	Upper
101	100		
103	63.0	44.1	84.1
105	12.2	0.0	31.1

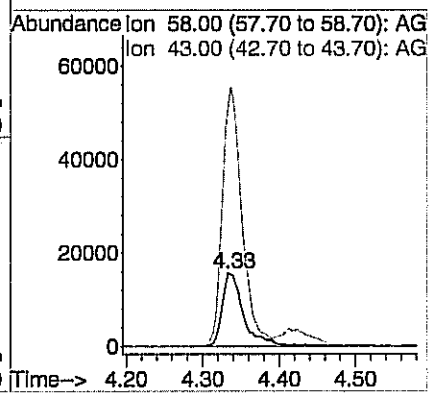


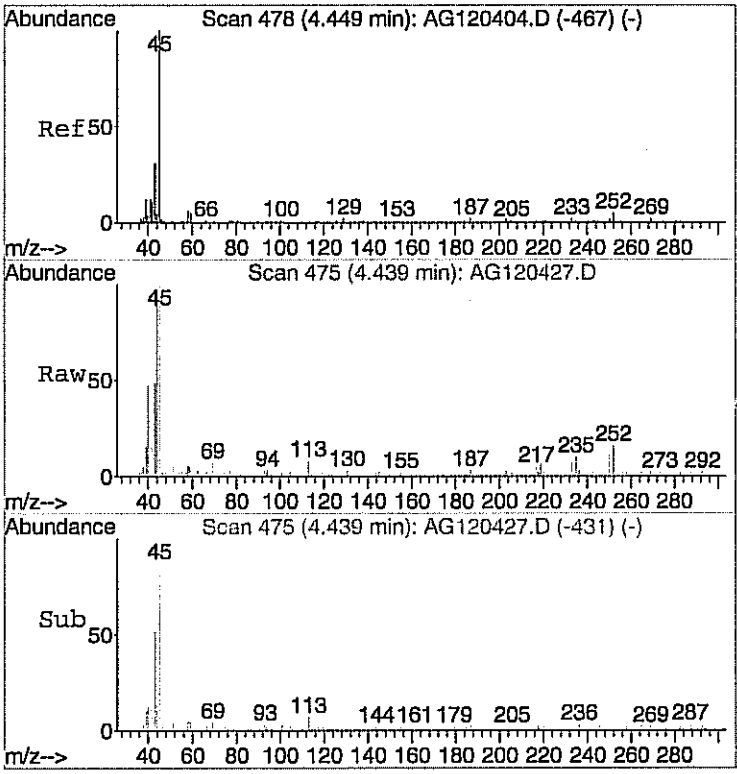


#12
Acetone
Concen: 5.01 ppb
RT: 4.33 min Scan# 442
Delta R.T. -0.02 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 58 Resp: 31215

Ion	Ratio	Lower	Upper
58	100		
43	351.9	398.6	458.6#

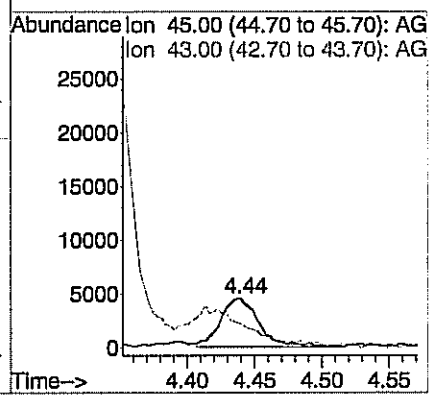


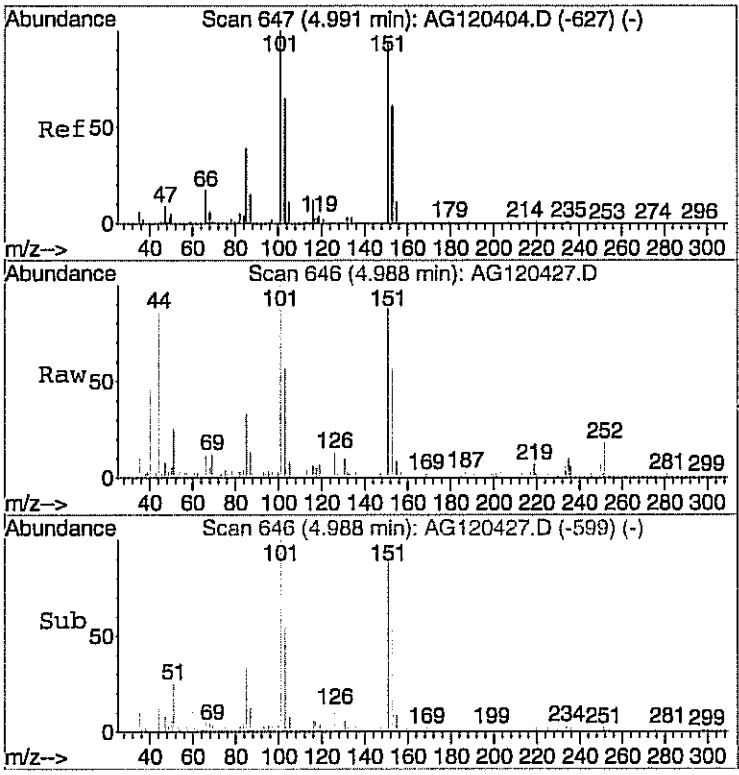


#13
Isopropyl alcohol
Concen: 0.52 ppb
RT: 4.44 min Scan# 475
Delta R.T. -0.01 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 45 Resp: 8872

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	20.0

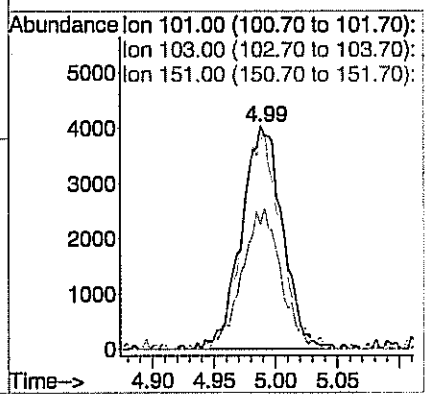


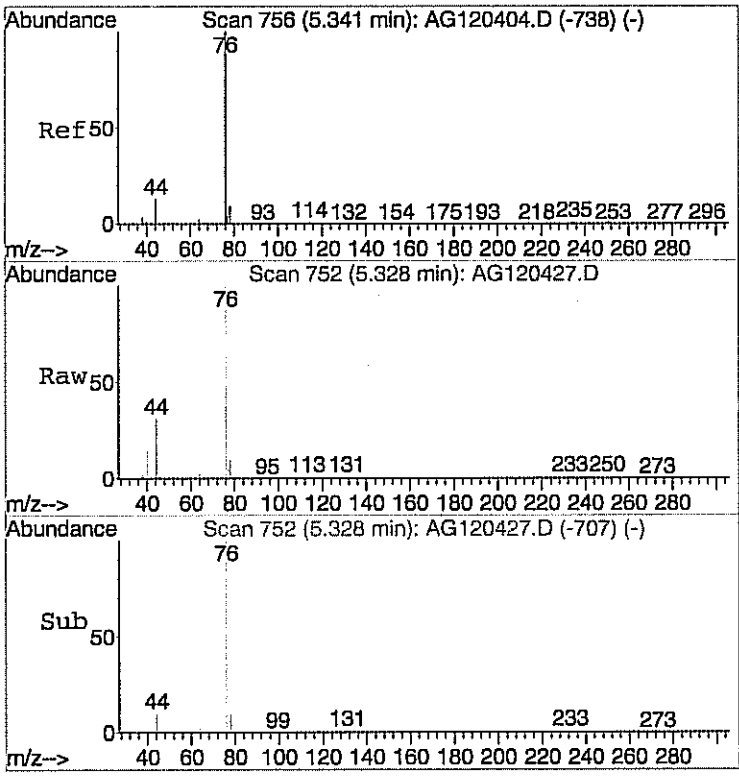


#15
Freon 113
Concen: 0.20 ppb
RT: 4.99 min Scan# 646
Delta R.T. 0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion:101 Resp: 9427

Ion	Ratio	Lower	Upper
101	100		
103	59.2	46.5	86.5
151	92.9	72.2	112.2

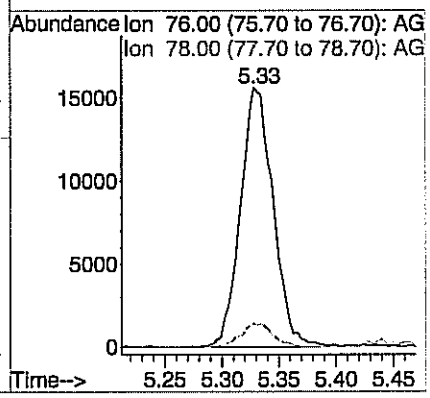


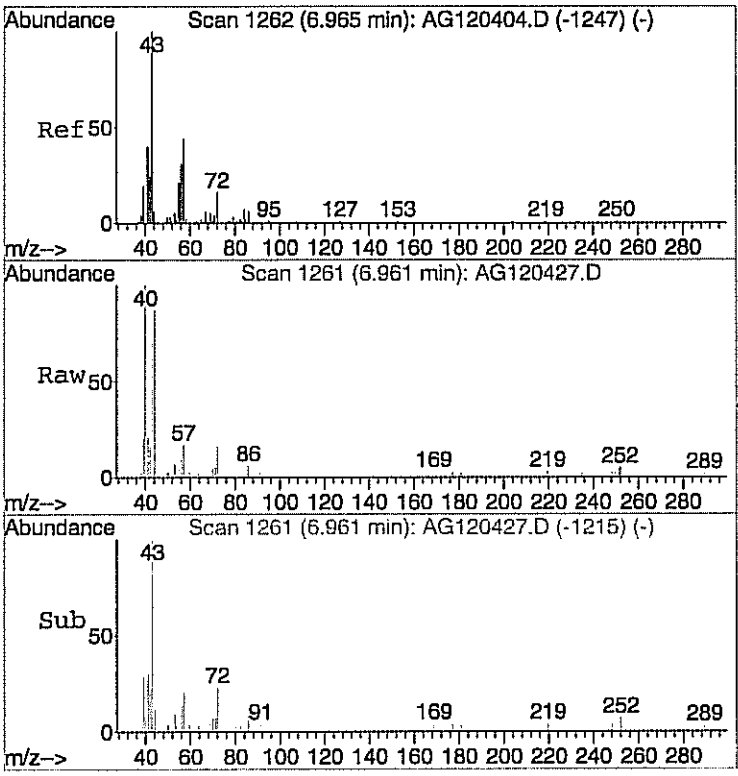


#18
Carbon disulfide
Concen: 0.55 ppb
RT: 5.33 min Scan# 752
Delta R.T. -0.01 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 76 Resp: 31483

Ion	Ratio	Lower	Upper
76	100		
78	8.8	0.0	29.6

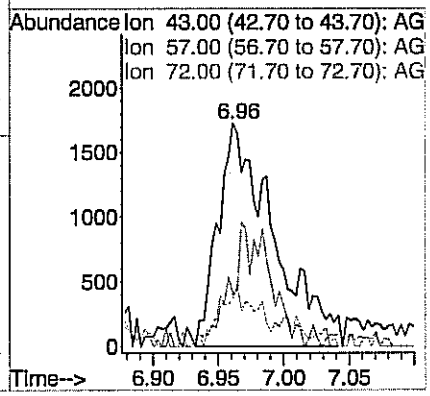


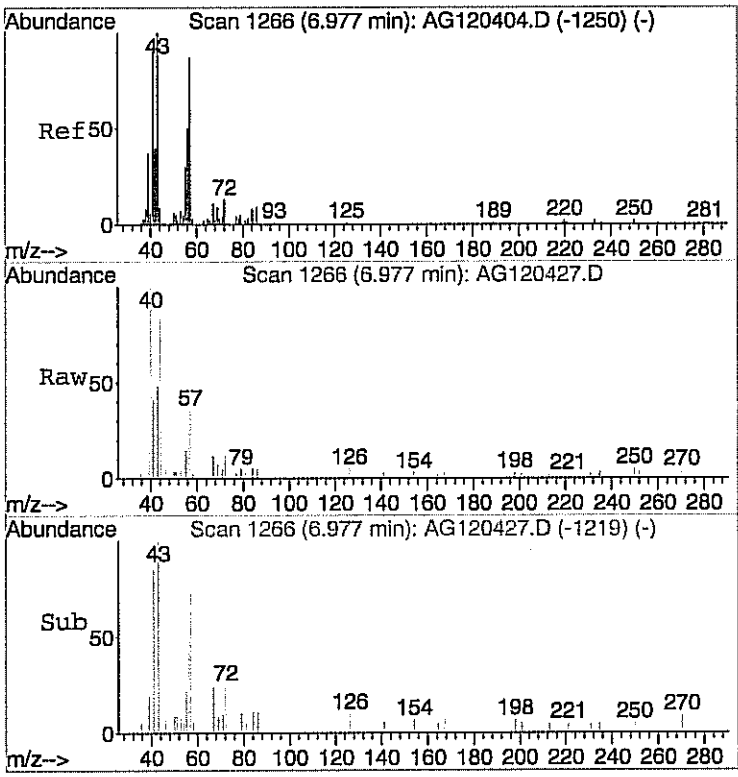


#23
Methyl Ethyl Ketone
Concen: 0.17 ppb
RT: 6.96 min Scan# 1261
Delta R.T. -0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 43 Resp: 5050

Ion	Ratio	Lower	Upper
43	100		
57	39.3	34.3	74.3
72	25.4	0.0	37.4

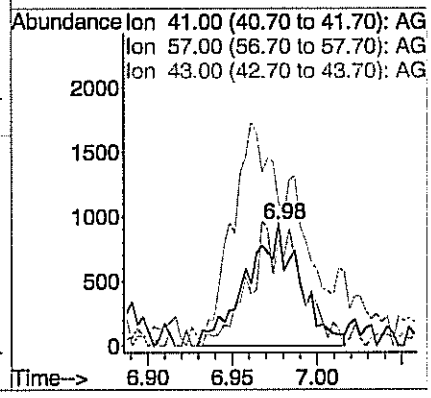


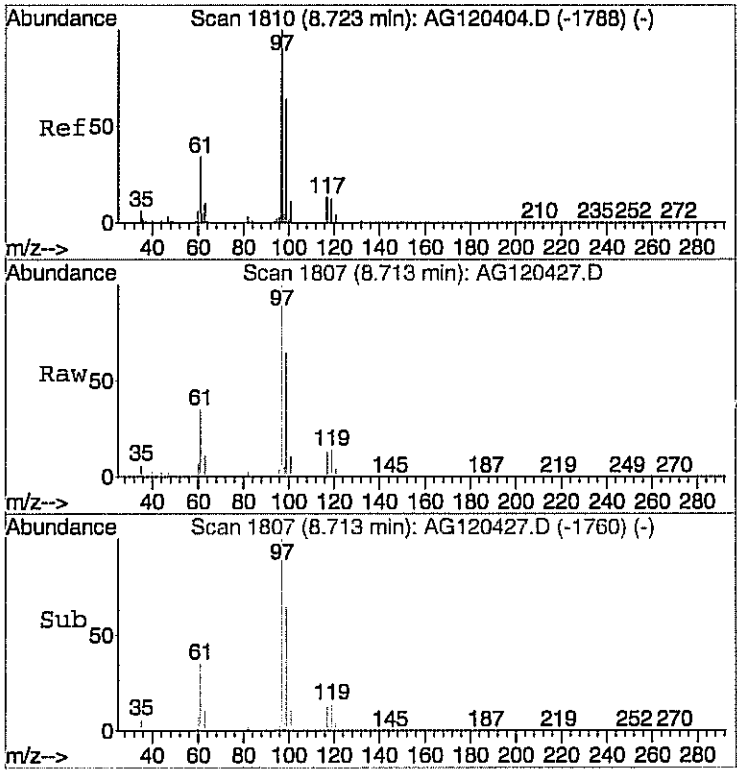


#25
Hexane
Concen: 0.14 ppb
RT: 6.98 min Scan# 1266
Delta R.T. 0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 41 Resp: 2037

Ion	Ratio	Lower	Upper
41	100		
57	97.4	89.3	129.3
43	247.9	182.0	222.0#

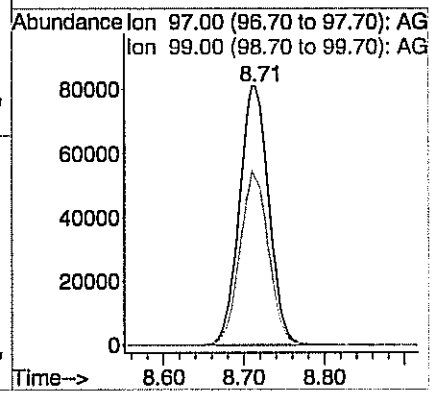


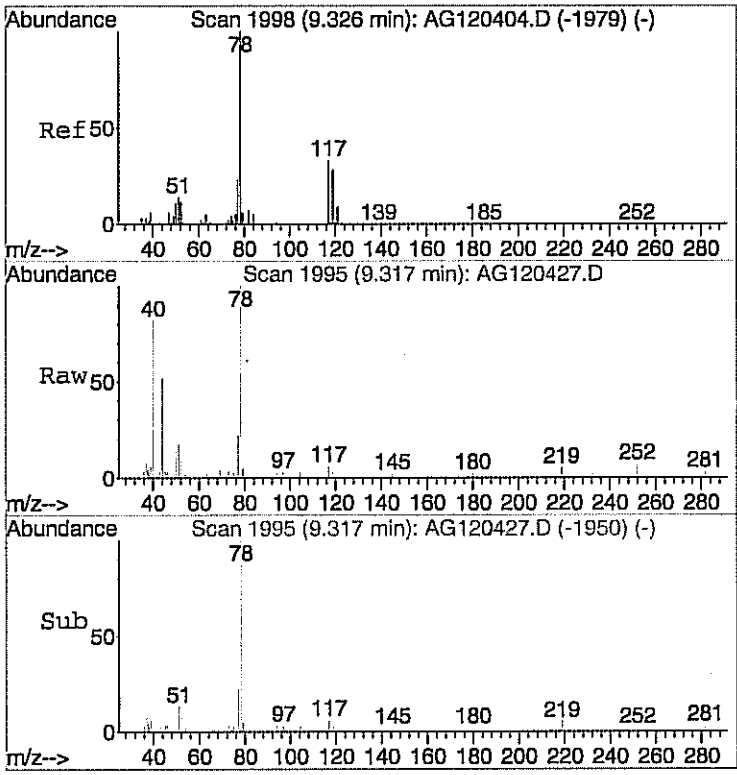


#31
1,1,1-trichloroethane
Concen: 3.44 ppb
RT: 8.71 min Scan# 1807
Delta R.T. 0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 97 Resp: 204553

Ion	Ratio	Lower	Upper
97	100		
99	65.4	45.0	85.0

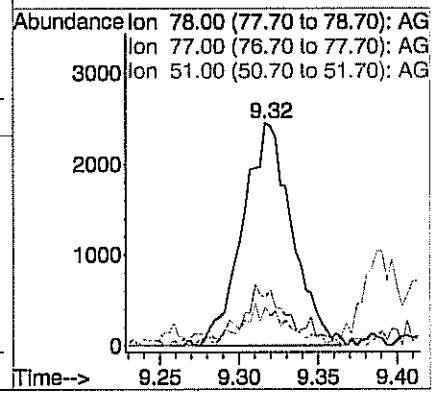


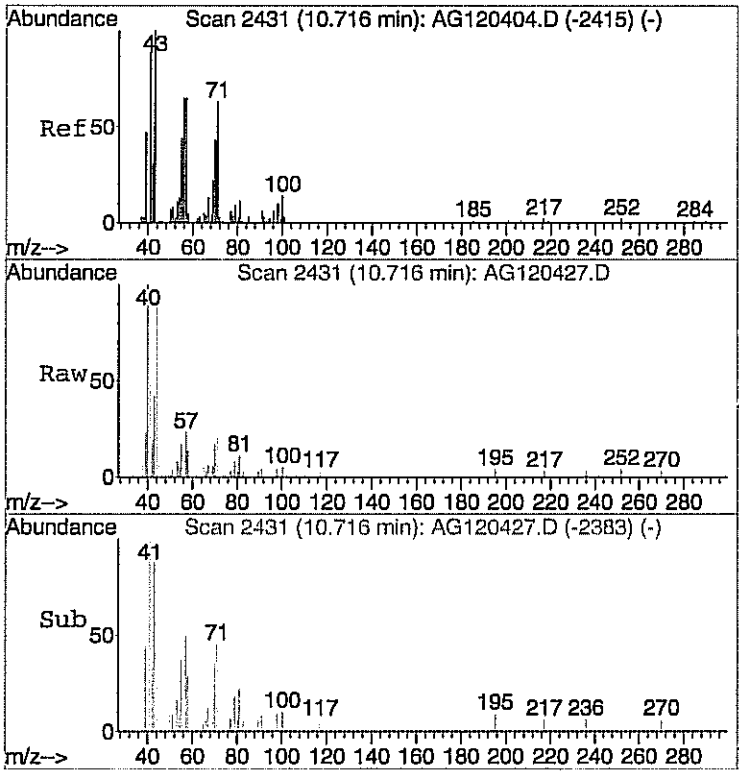


#34
Benzene
Concen: 0.12 ppb
RT: 9.32 min Scan# 1995
Delta R.T. -0.01 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 78 Resp: 5301

Ion	Ratio	Lower	Upper
78	100		
77	24.8	9.2	49.2
51	16.4	0.0	35.4

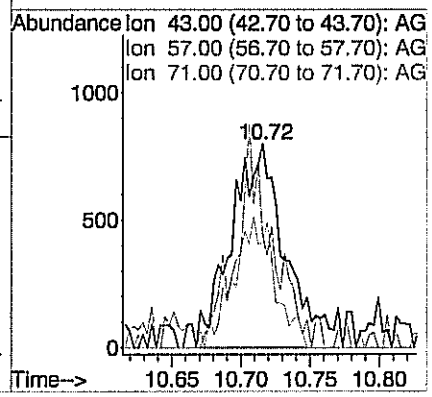


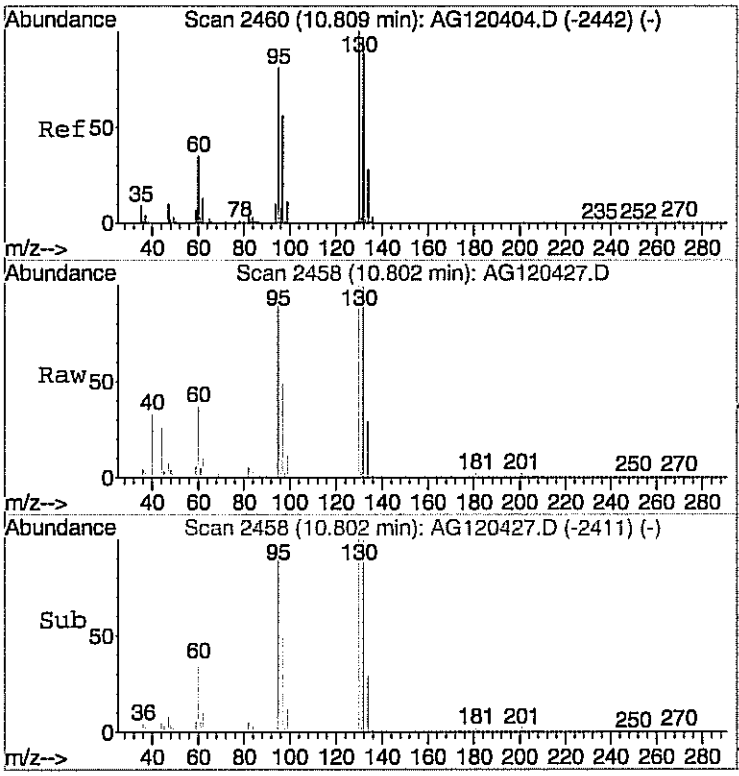


#37
Heptane
Concen: 0.18 ppb
RT: 10.72 min Scan# 2431
Delta R.T. 0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 43 Resp: 2176

Ion	Ratio	Lower	Upper
43	100		
57	50.9	37.2	77.2
71	49.4	43.4	83.4

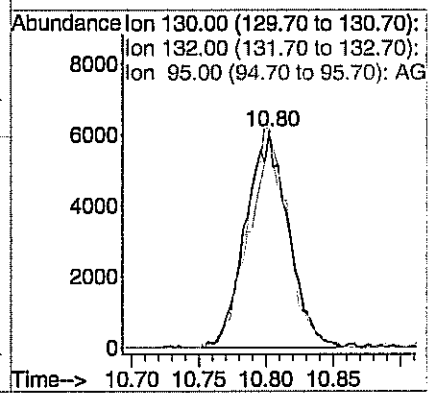


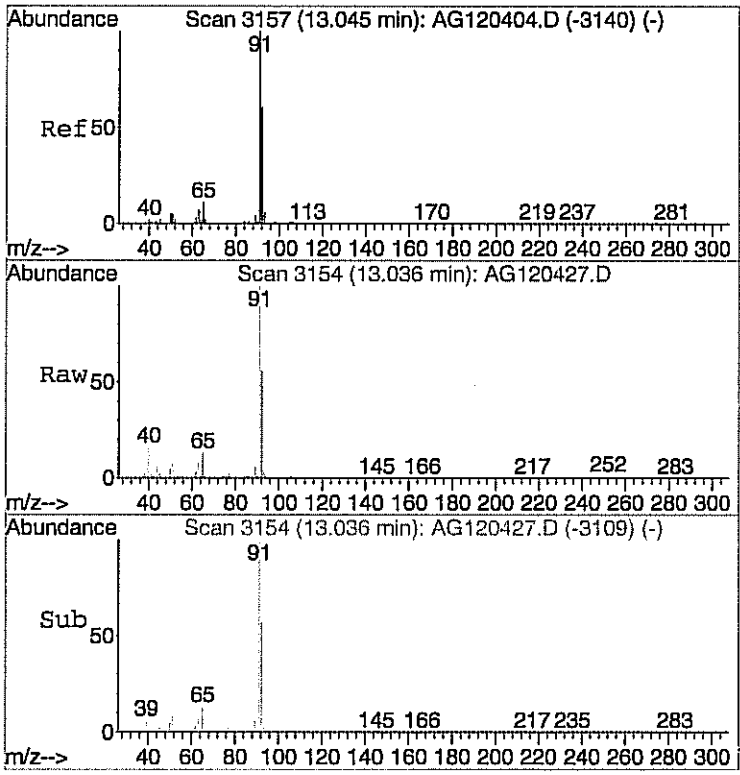


#38
Trichloroethene
Concen: 0.39 ppb
RT: 10.80 min Scan# 2458
Delta R.T. 0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion:130 Resp: 13414

Ion	Ratio	Lower	Upper
130	100		
132	101.6	77.3	117.3
95	89.8	71.1	111.1

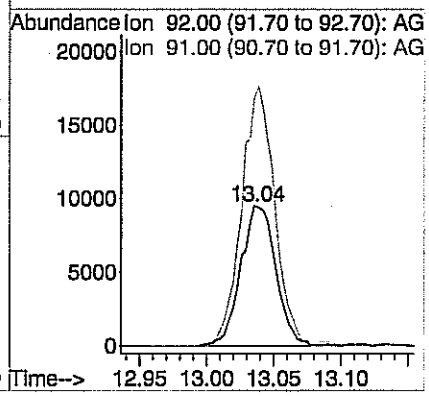


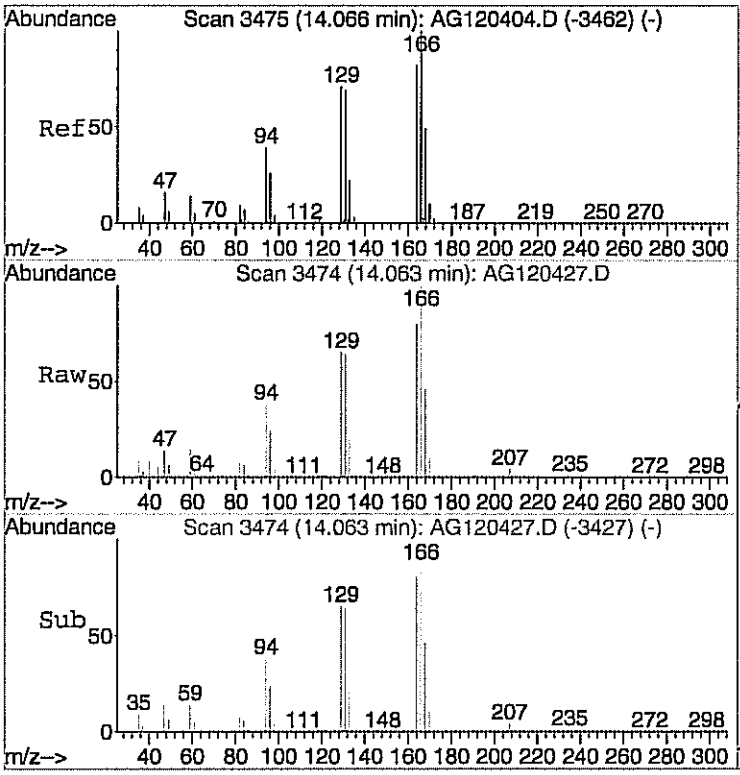


#45
Toluene
Concen: 0.58 ppb
RT: 13.04 min Scan# 3154
Delta R.T. -0.01 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 92 Resp: 17318

Ion	Ratio	Lower	Upper
92	100		
91	176.8	157.6	197.6

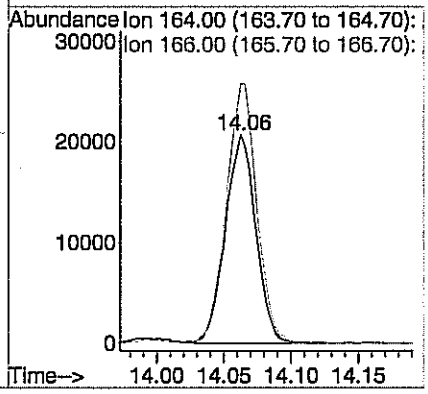


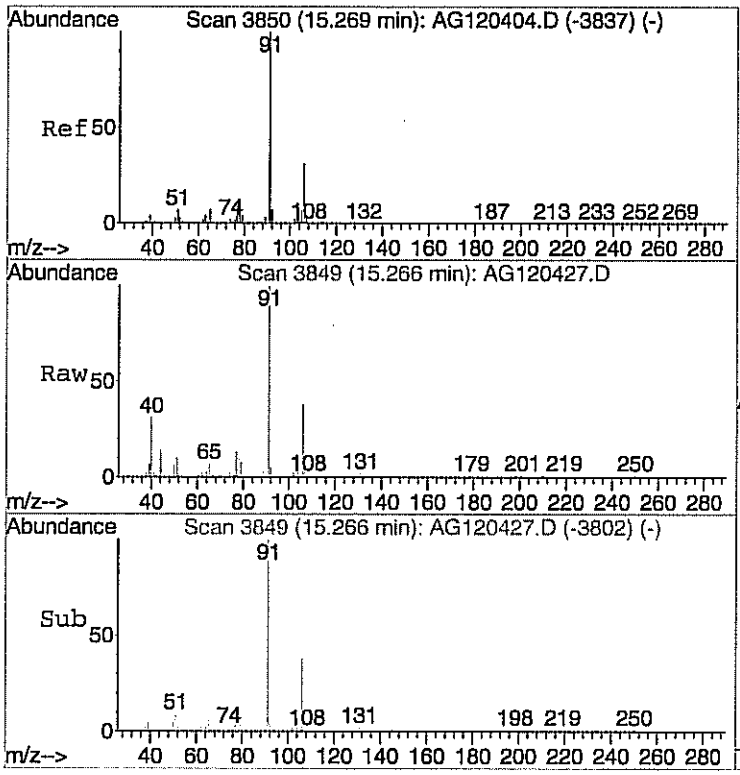


#50
Tetrachloroethylene
Concen: 0.78 ppb
RT: 14.06 min Scan# 3474
Delta R.T. 0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion:164 Resp: 32913

Ion	Ratio	Lower	Upper
164	100		
166	124.2	109.0	149.0

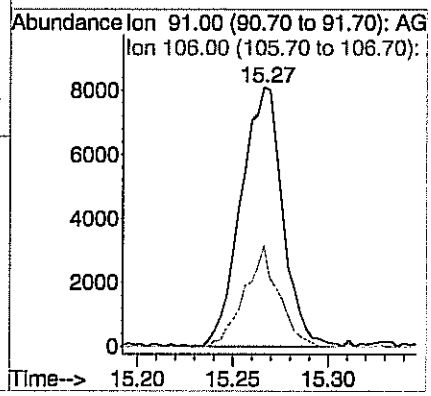


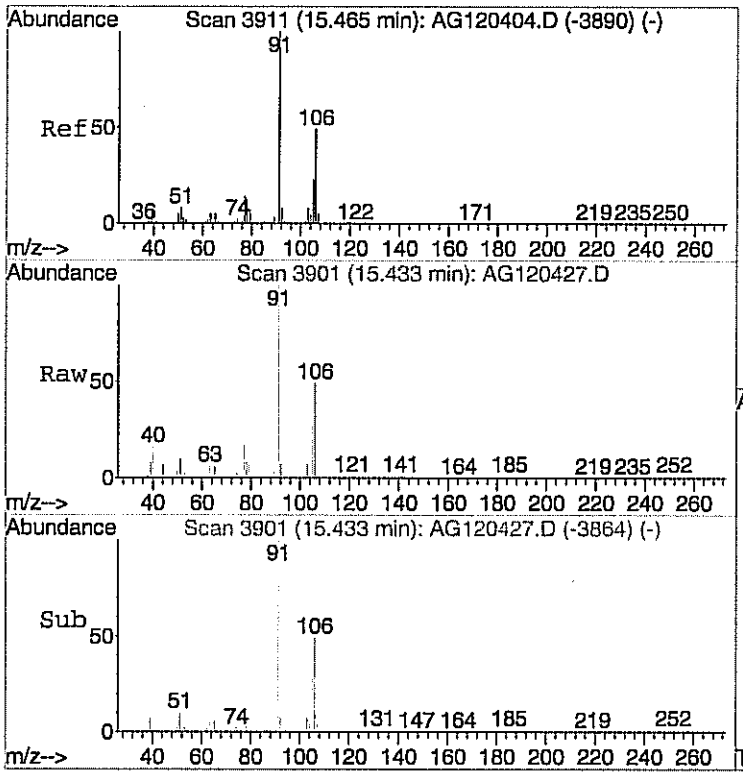


#52
Ethylbenzene
Concen: 0.22 ppb
RT: 15.27 min Scan# 3849
Delta R.T. 0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 91 Resp: 12253

Ion	Ratio	Lower	Upper
91	100		
106	31.4	11.6	51.6

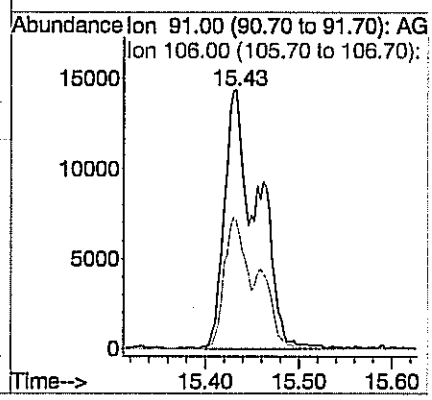


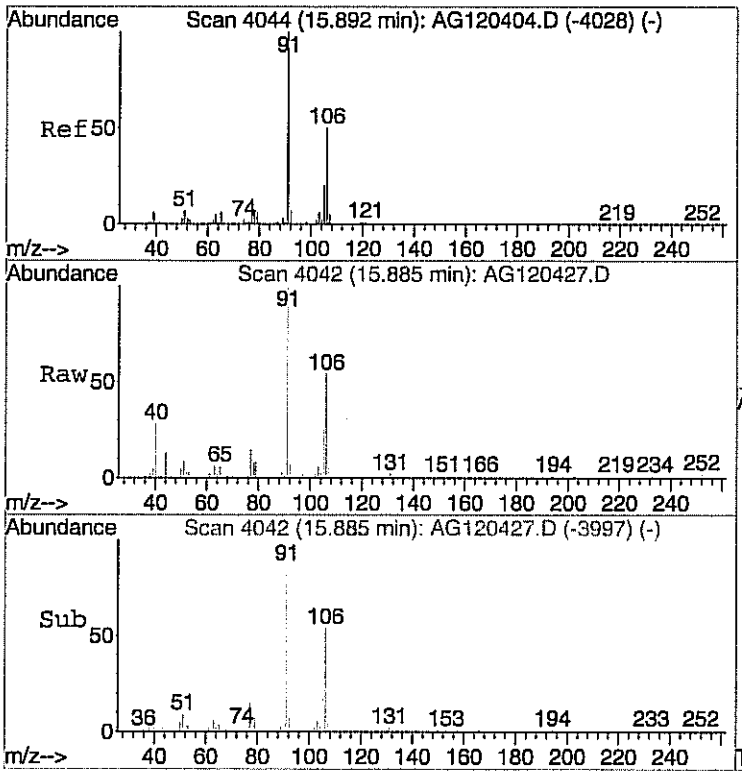


#53
m&p-xylene
Concen: 0.70 ppb
RT: 15.43 min Scan# 3901
Delta R.T. -0.03 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 91 Resp: 35359

Ion	Ratio	Lower	Upper
91	100		
106	49.4	29.0	69.0

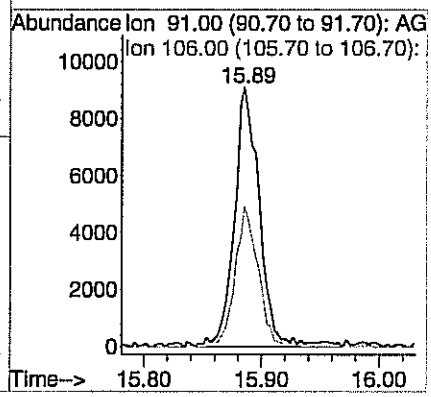


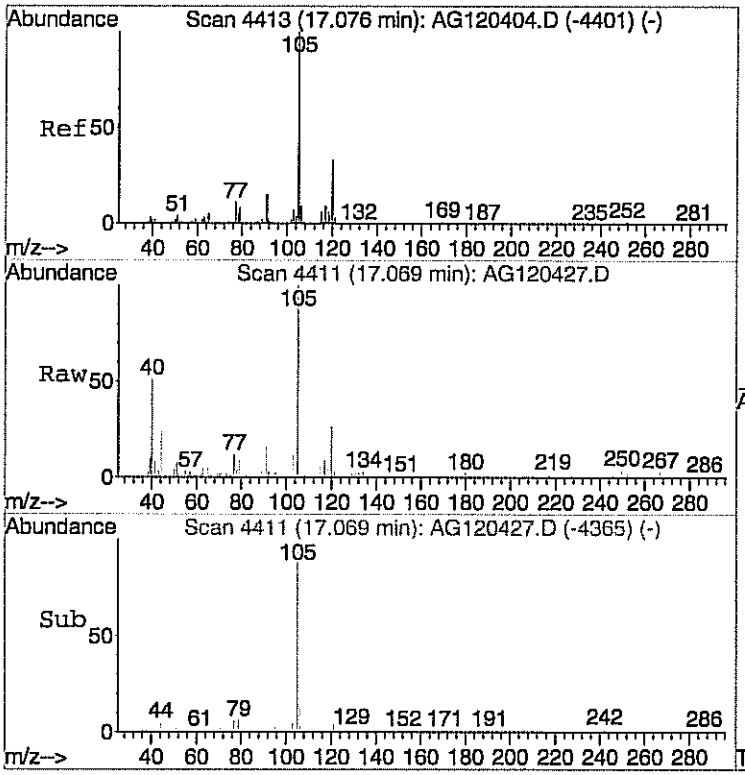


#56
o-xylene
Concen: 0.22 ppb
RT: 15.89 min Scan# 4042
Delta R.T. -0.01 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion: 91 Resp: 13643

Ion	Ratio	Lower	Upper
91	100		
106	48.6	29.4	69.4

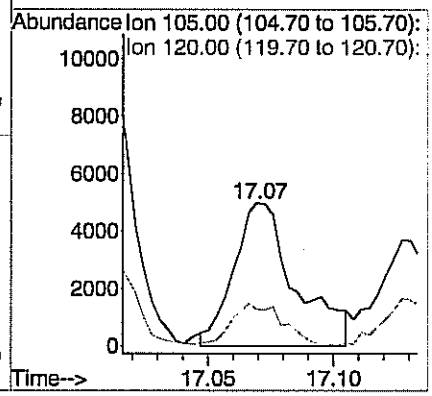


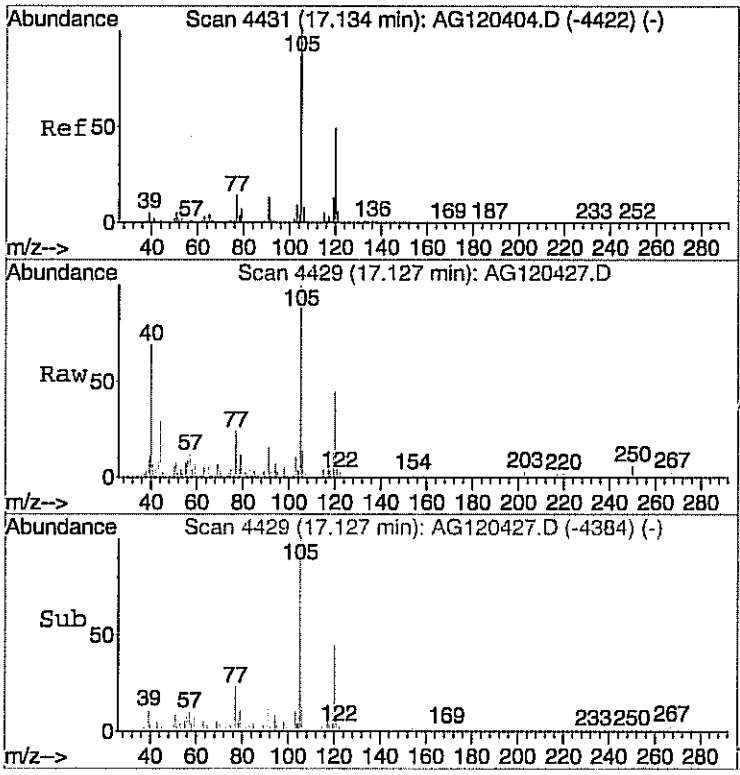


#59
4-ethyltoluene
Concen: 0.24 ppb m
RT: 17.07 min Scan# 4411
Delta R.T. -0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion:105 Resp: 8473

Ion	Ratio	Lower	Upper
105	100		
120	25.1	11.8	51.8

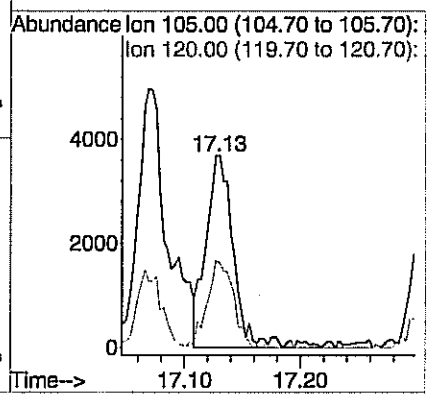


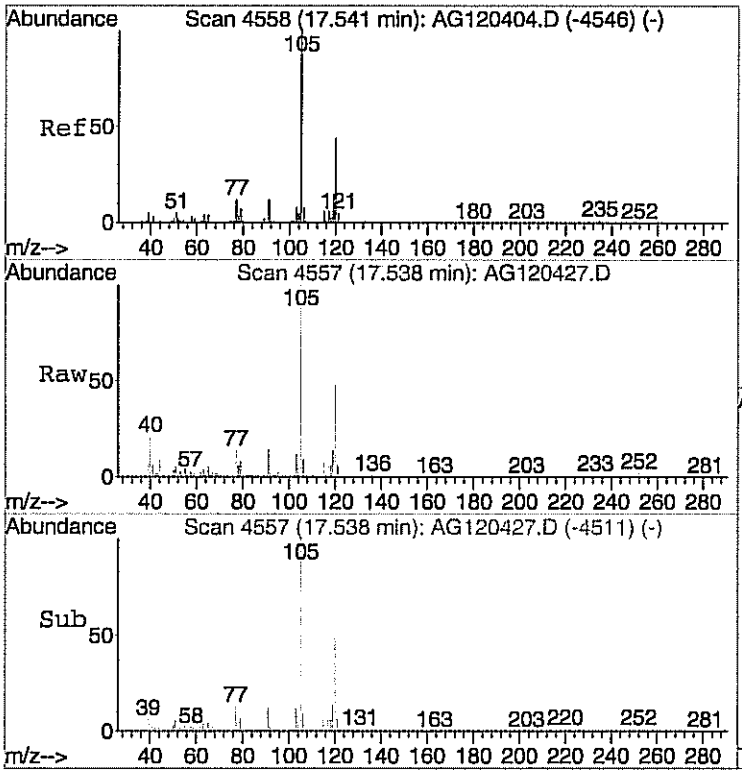


#60
1,3,5-trimethylbenzene
Concen: 0.13 ppb m
RT: 17.13 min Scan# 4429
Delta R.T. -0.01 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion:105 Resp: 6198

Ion	Ratio	Lower	Upper
105	100		
120	74.3	29.1	69.1#

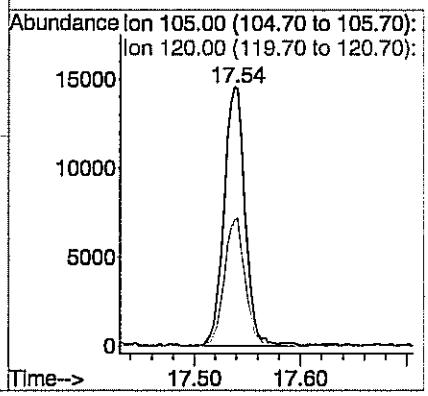




#61
1,2,4-trimethylbenzene
Concen: 0.60 ppb
RT: 17.54 min Scan# 4557
Delta R.T. -0.00 min
Lab File: AG120427.D
Acq: 5 Dec 2009 00:37

Tgt Ion:105 Resp: 20369

Ion	Ratio	Lower	Upper
105	100		
120	48.1	27.4	67.4



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120442.D
Acq On : 5 Dec 2009 8:33
Sample : C0912007-002A 10X
Misc : C0912007-002A
MS Integration Params: RTEINT.P
Quant Time: Dec 05 08:55:35 2009

Vial: 3
Operator: RJP
Inst : MSD #1
Multiplr: 1.00
Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

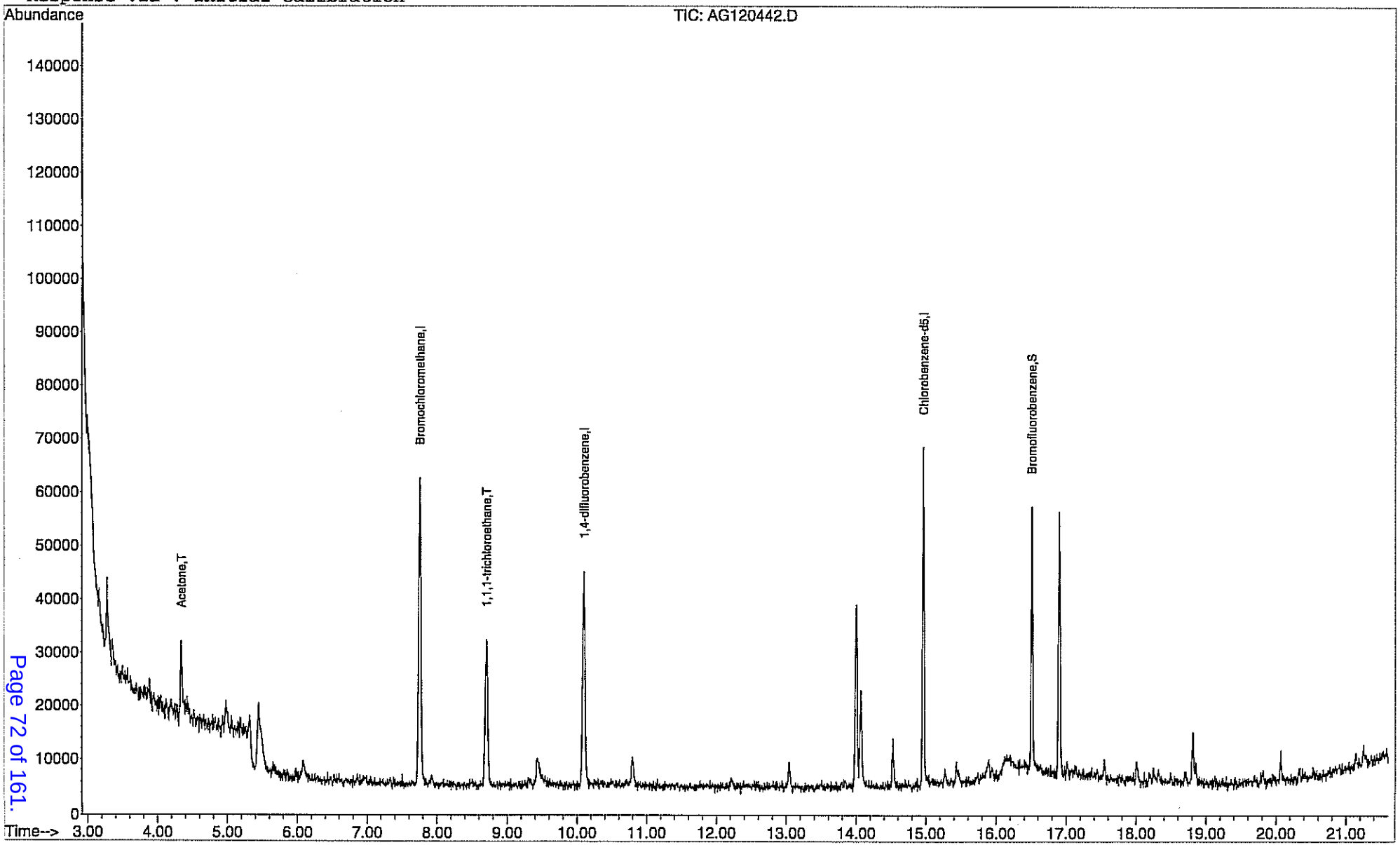
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.75	128	20555	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.10	114	41169	1.00	ppb	0.00
44) Chlorobenzene-d5	14.95	117	36006	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	12592	0.76	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 76.00%			
Target Compounds						Qvalue
12) Acetone	4.34	58	4751m	0.67	ppb	
31) 1,1,1-trichloroethane	8.71	97	22849	0.36	ppb	96

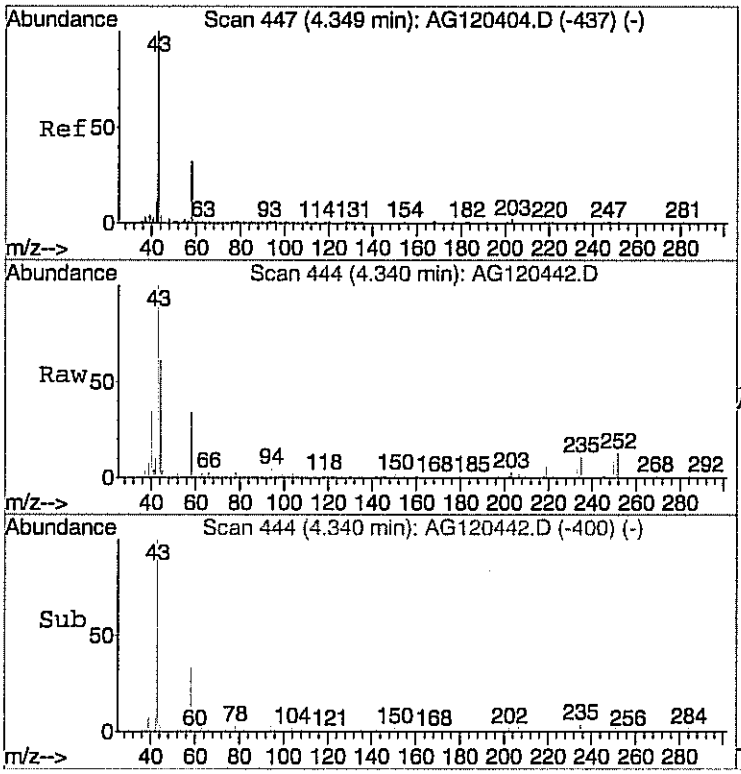
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120442.D Vial: 3
Acq On : 5 Dec 2009 8:33 Operator: RJP
Sample : C0912007-002A 10X Inst : MSD #1
Misc : C0912007-002A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:11 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration

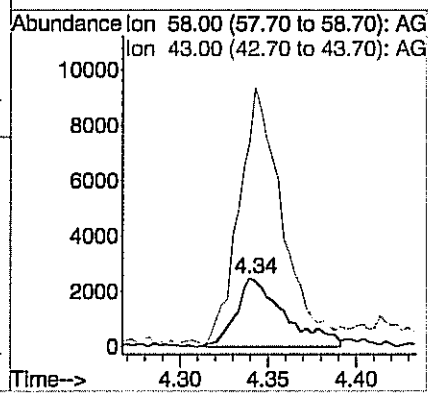


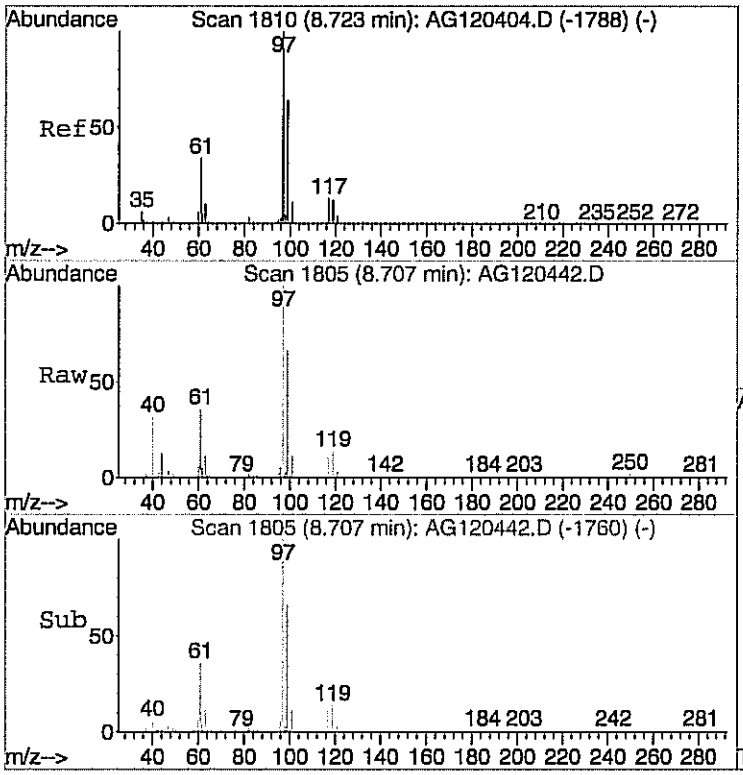


#12
Acetone
Concen: 0.67 ppb m
RT: 4.34 min Scan# 444
Delta R.T. -0.01 min
Lab File: AG120442.D
Acq: 5 Dec 2009 8:33

Tgt Ion: 58 Resp: 4751

Ion	Ratio	Lower	Upper
58	100		
43	406.1	398.6	458.6

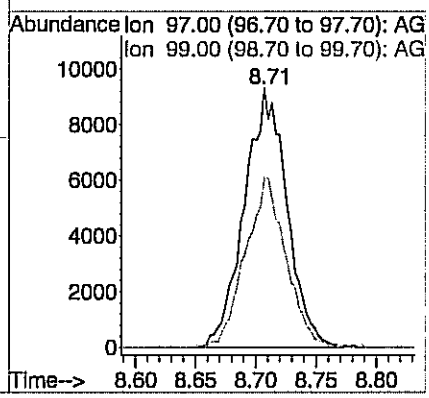




#31
1,1,1-trichloroethane
Concen: 0.36 ppb
RT: 8.71 min Scan# 1805
Delta R.T. -0.01 min
Lab File: AG120442.D
Acq: 5 Dec 2009 8:33

Tgt Ion: 97 Resp: 22849

Ion	Ratio	Lower	Upper
97	100		
99	62.0	45.0	85.0



Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-6			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.15	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.38	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	0.12	0.15	J	ppbV	1	12/4/2009
Acetone	8.4	3.0		ppbV	10	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	< 0.15	0.15		ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	0.21	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.15	0.15		ppbV	1	12/4/2009
Freon 113	1.2	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.42	0.15		ppbV	1	12/4/2009
Heptane	< 0.15	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	< 0.15	0.15		ppbV	1	12/4/2009
Isopropyl alcohol	2.0	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.25	0.30	J	ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	0.47	0.15		ppbV	1	12/4/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.21	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.22	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	87.0	70-130		%REC	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.83	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	1.9	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	0.60	0.75	J	ug/m3	1	12/4/2009
Acetone	20	7.2		ug/m3	10	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	< 0.49	0.49		ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	0.66	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	< 0.31	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/4/2009
Freon 11	0.86	0.86		ug/m3	1	12/4/2009
Freon 113	9.5	1.2		ug/m3	1	12/4/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	< 0.62	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	< 0.54	0.54		ug/m3	1	12/4/2009
Isopropyl alcohol	4.9	0.37		ug/m3	1	12/4/2009
m&p-Xylene	1.1	1.3	J	ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	1.7	0.53		ug/m3	1	12/4/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	1.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	0.84	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	< 0.82	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120428.D Vial: 6
Acq On : 5 Dec 2009 1:10 Operator: RJP
Sample : C0912007-003A Inst : MSD #1
Misc : C0912007-003A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 05 01:31:42 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

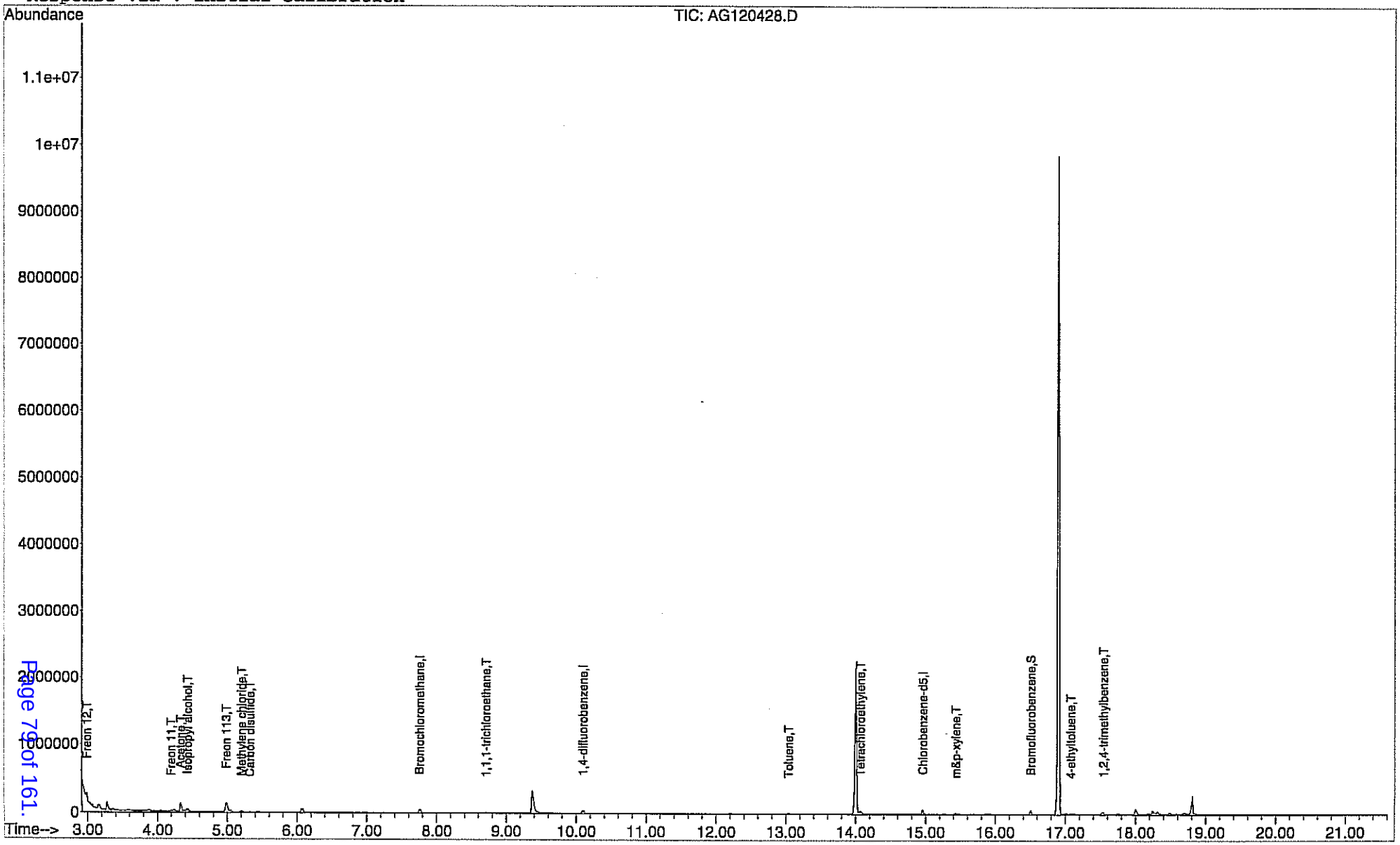
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	18055	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	39425	1.00	ppb		0.00
44) Chlorobenzene-d5	14.95	117	37545	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	15003	0.87	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 87.00%				
Target Compounds							Qvalue
3) Freon 12	2.99	85	39421	0.42	ppb		99
11) Freon 11	4.20	101	9985	0.15	ppb		99
12) Acetone	4.34	58	38633m	6.18	ppb		
13) Isopropyl alcohol	4.43	45	33629	1.98	ppb	#	100
15) Freon 113	4.99	101	56884	1.22	ppb		98
16) Methylene chloride	5.21	84	8385	0.47	ppb	#	85
18) Carbon disulfide	5.33	76	12068	0.21	ppb		97
31) 1,1,1-trichloroethane	8.70	97	9235	0.15	ppb		100
45) Toluene	13.04	92	6320	0.22	ppb		97
50) Tetrachloroethylene	14.07	164	8423	0.21	ppb		99
53) m&p-xylene	15.43	91	12121	0.25	ppb		97
59) 4-ethyltoluene	17.07	105	3924m	0.12	ppb		
61) 1,2,4-trimethylbenzene	17.54	105	12228	0.38	ppb		97

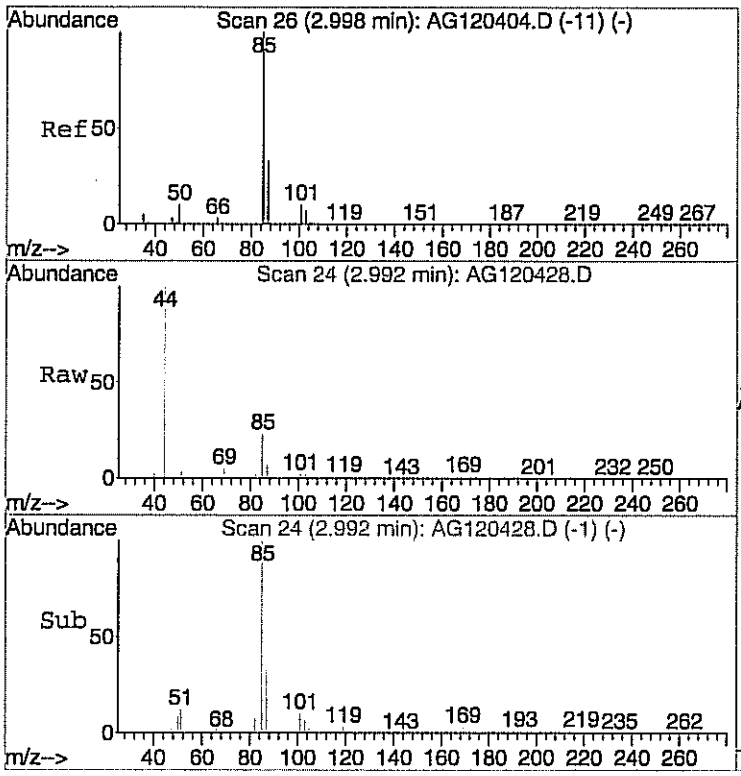
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120428.D Vial: 6
Acq On : 5 Dec 2009 1:10 Operator: RJP
Sample : C0912007-003A Inst : MSD #1
Misc : C0912007-003A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:05 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration

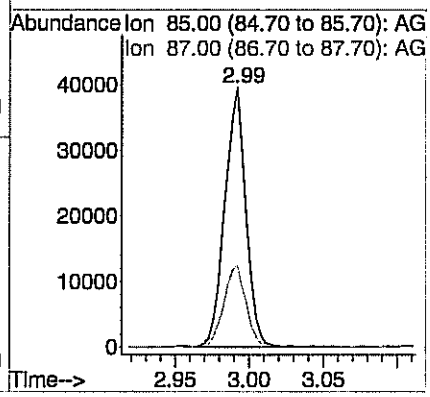


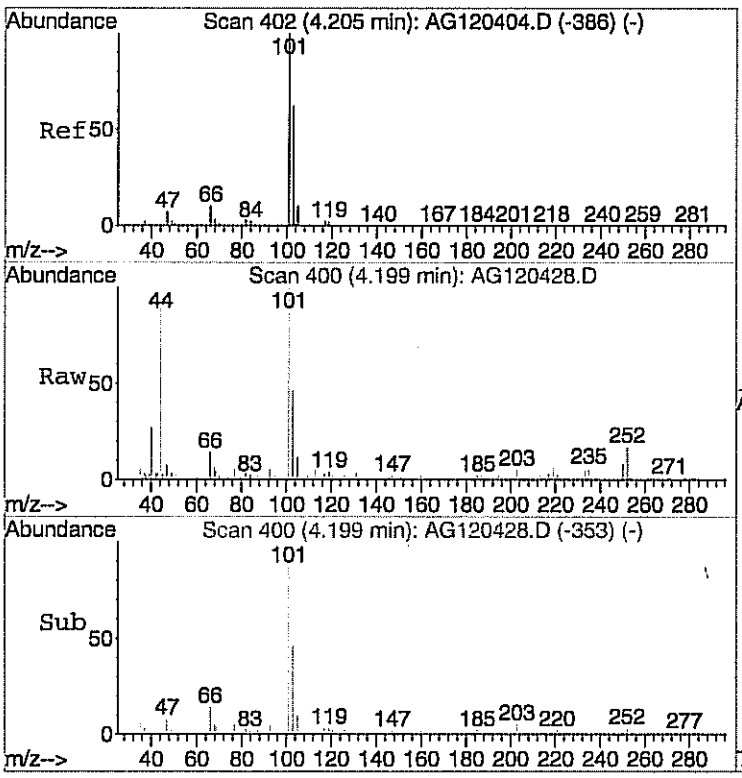


#3
Freon 12
Concen: 0.42 ppb
RT: 2.99 min Scan# 24
Delta R.T. -0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 85 Resp: 39421

Ion	Ratio	Lower	Upper
85	100		
87	33.0	13.6	53.6

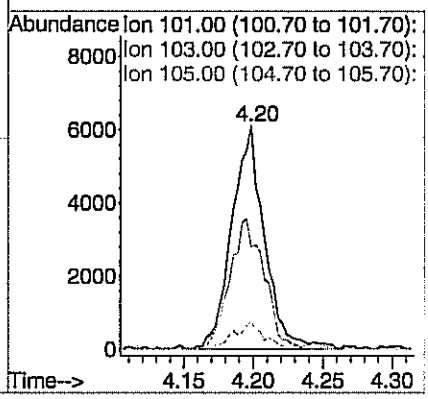


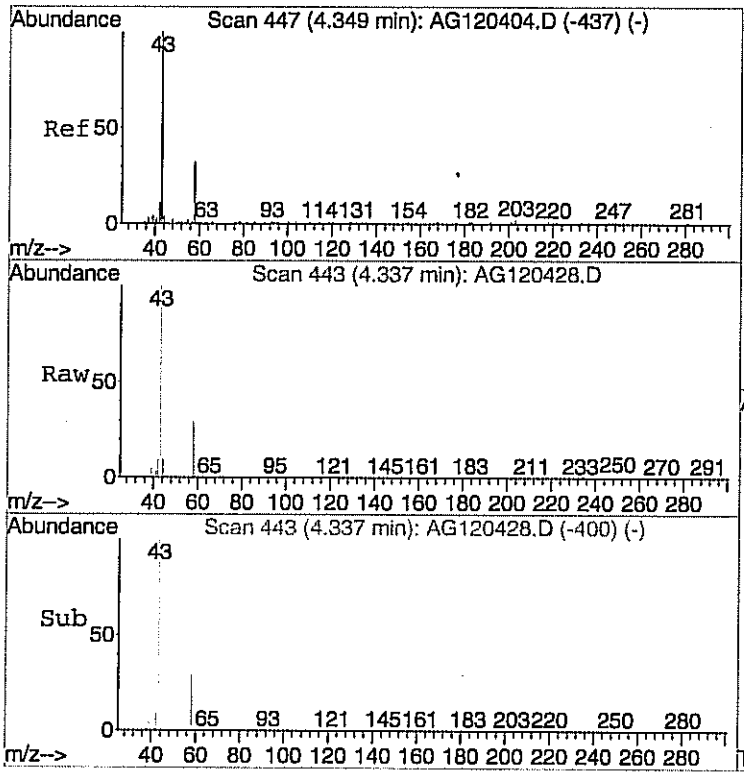


#11
Freon 11
Concen: 0.15 ppb
RT: 4.20 min Scan# 400
Delta R.T. 0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion:101 Resp: 9985

Ion	Ratio	Lower	Upper
101	100		
103	62.8	44.1	84.1
105	11.1	0.0	31.1

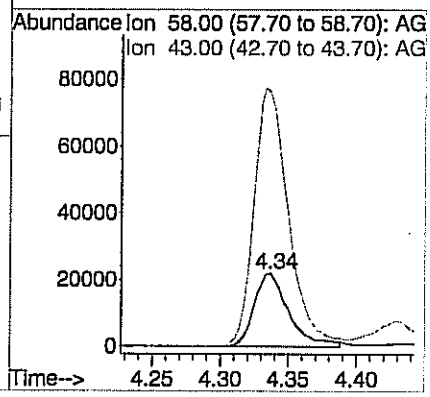


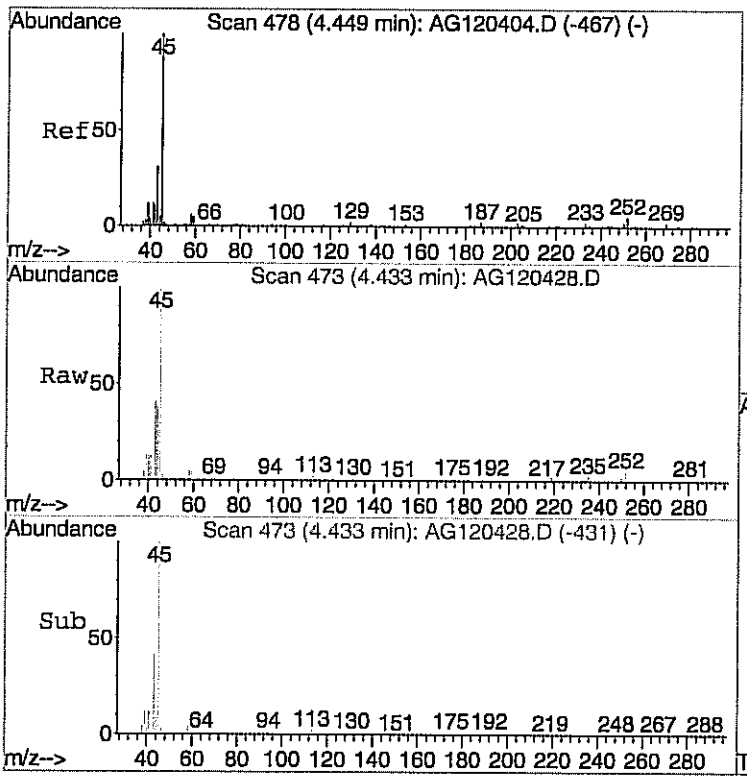


#12
Acetone
Concen: 6.18 ppb m
RT: 4.34 min Scan# 443
Delta R.T. -0.01 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 58 Resp: 38633

Ion	Ratio	Lower	Upper
58	100		
43	401.4	398.6	458.6

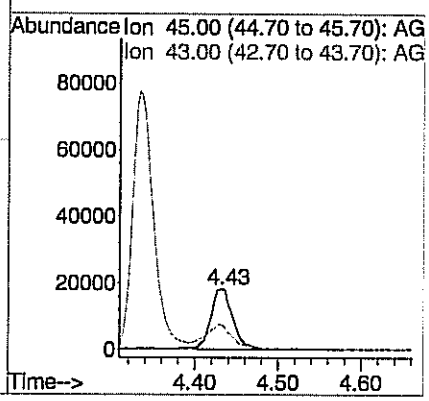


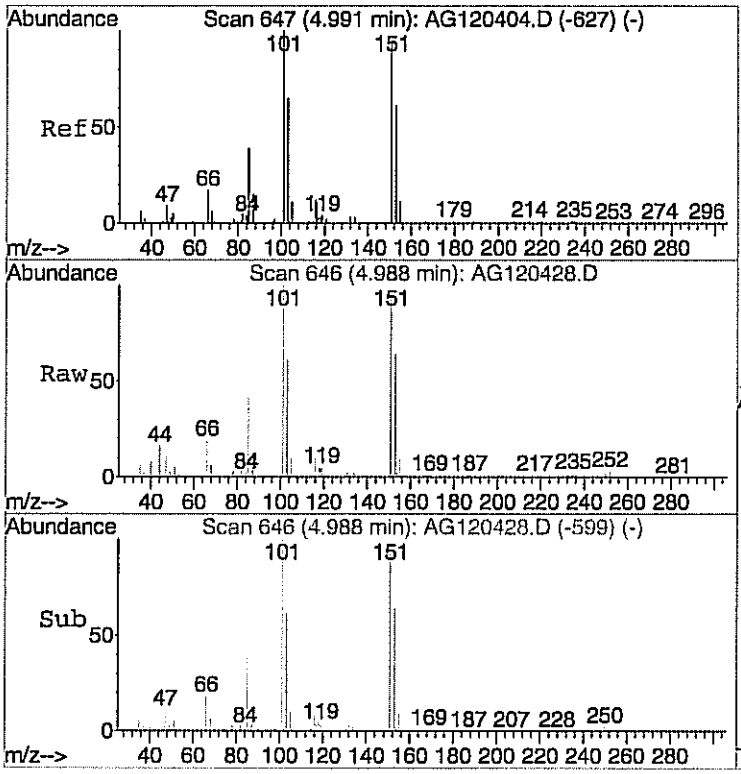


#13
Isopropyl alcohol
Concen: 1.98 ppb
RT: 4.43 min Scan# 473
Delta R.T. -0.02 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 45 Resp: 33629

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	20.0

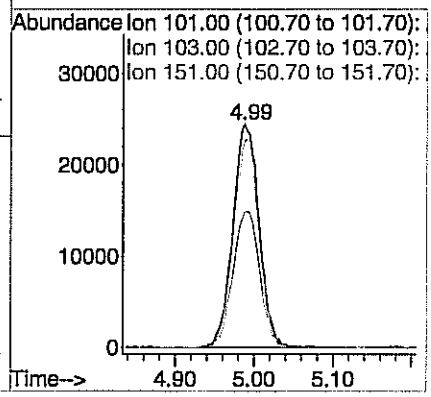


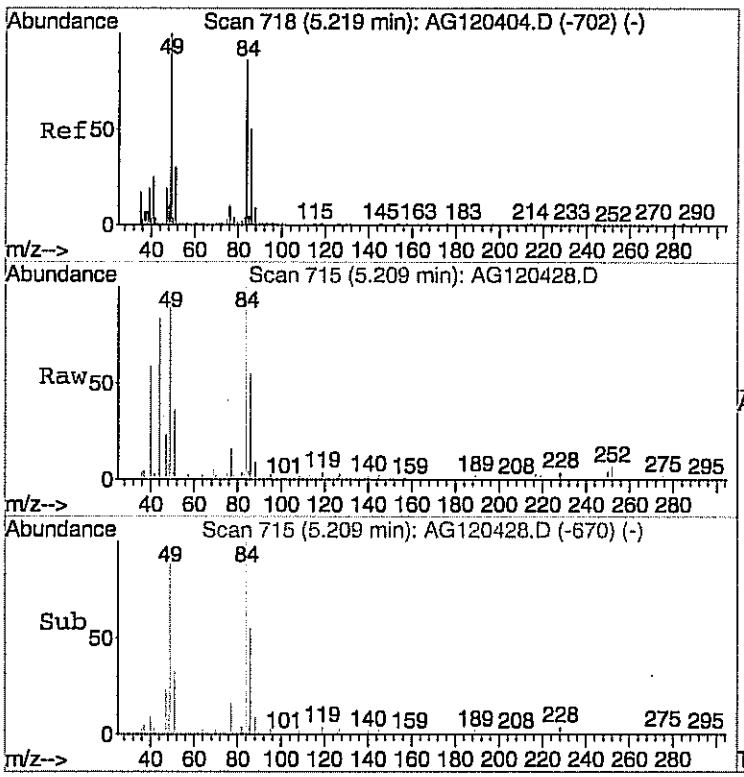


#15
Freon 113
Concen: 1.22 ppb
RT: 4.99 min Scan# 646
Delta R.T. 0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion:101 Resp: 56884

Ion	Ratio	Lower	Upper
101	100		
103	62.8	46.5	86.5
151	92.4	72.2	112.2

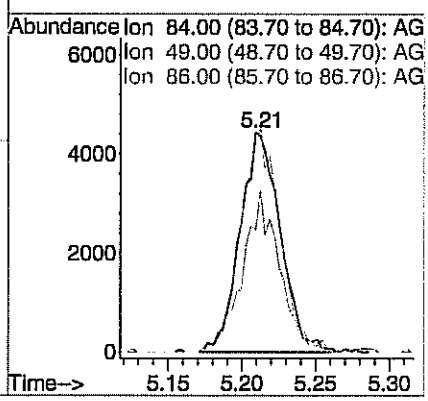


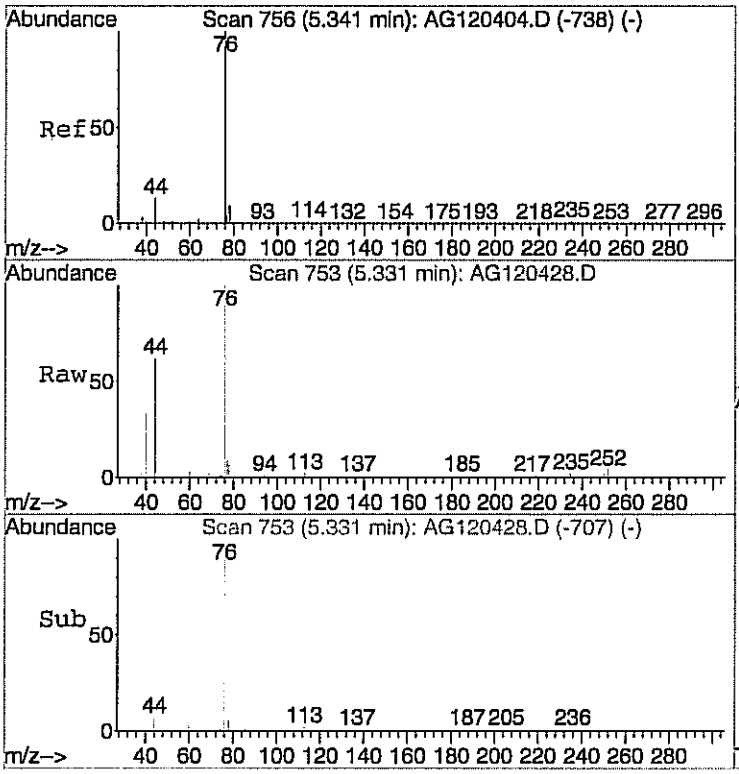


#16
Methylene chloride
Concen: 0.47 ppb
RT: 5.21 min Scan# 715
Delta R.T. -0.01 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 84 Resp: 8385

Ion	Ratio	Lower	Upper
84	100		
49	99.6	106.2	146.2#
86	66.5	47.2	87.2

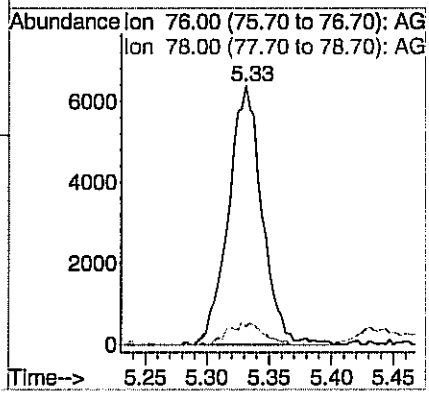


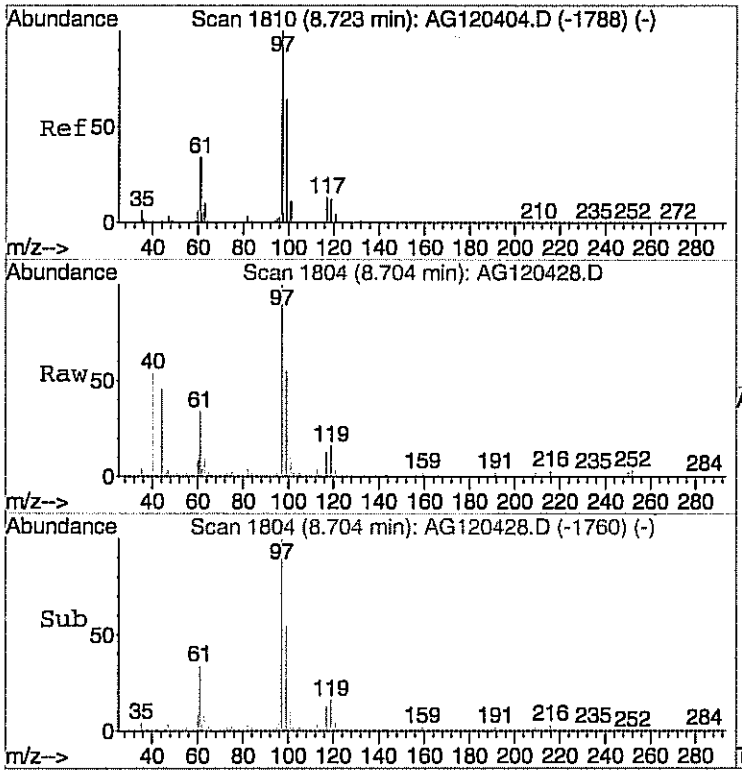


#18
Carbon disulfide
Concen: 0.21 ppb
RT: 5.33 min Scan# 753
Delta R.T. -0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 76 Resp: 12068

Ion	Ratio	Lower	Upper
76	100		
78	8.6	0.0	29.6

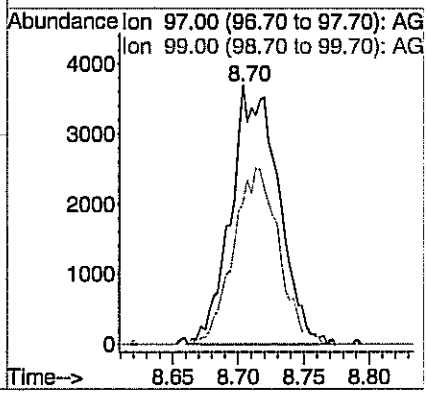


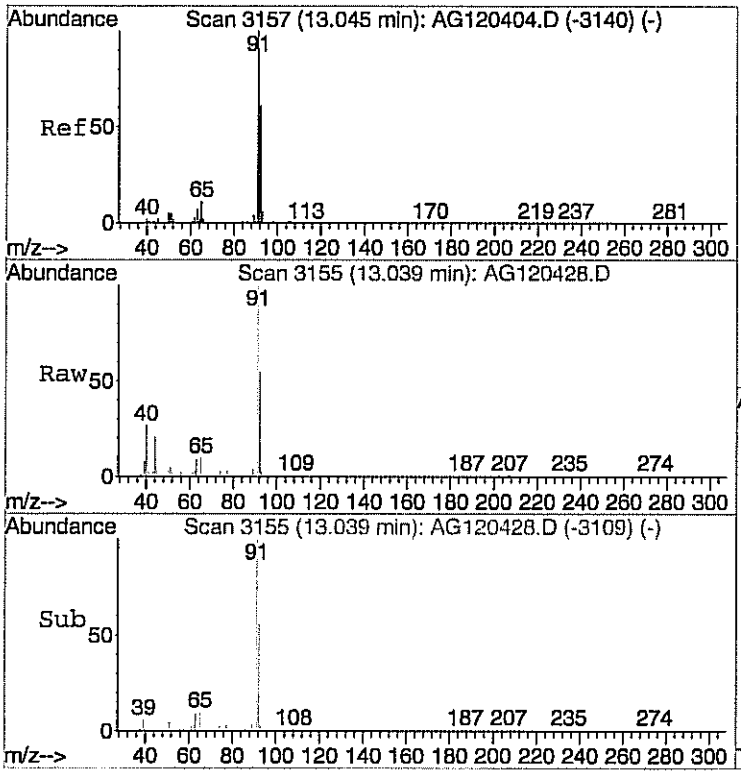


#31
1,1,1-trichloroethane
Concen: 0.15 ppb
RT: 8.70 min Scan# 1804
Delta R.T. -0.01 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 97 Resp: 9235

Ion	Ratio	Lower	Upper
97	100		
99	65.1	45.0	85.0

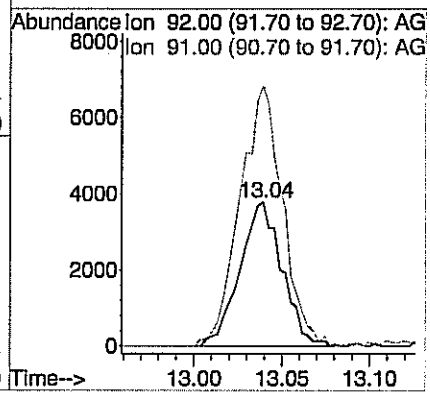


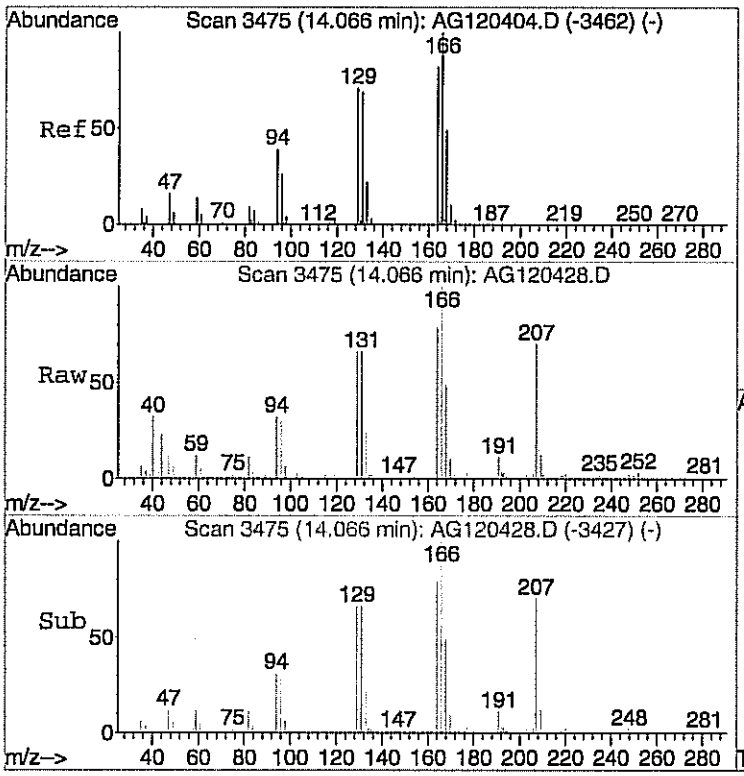


#45
Toluene
Concen: 0.22 ppb
RT: 13.04 min Scan# 3155
Delta R.T. -0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 92 Resp: 6320

Ion	Ratio	Lower	Upper
92	100		
91	182.3	157.6	197.6

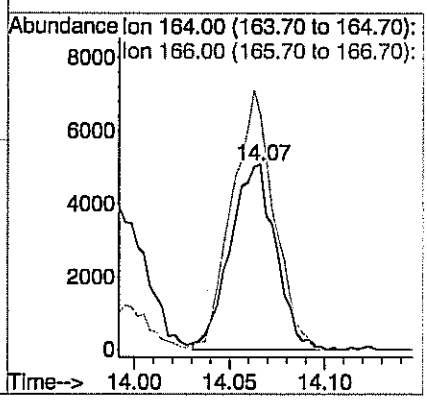


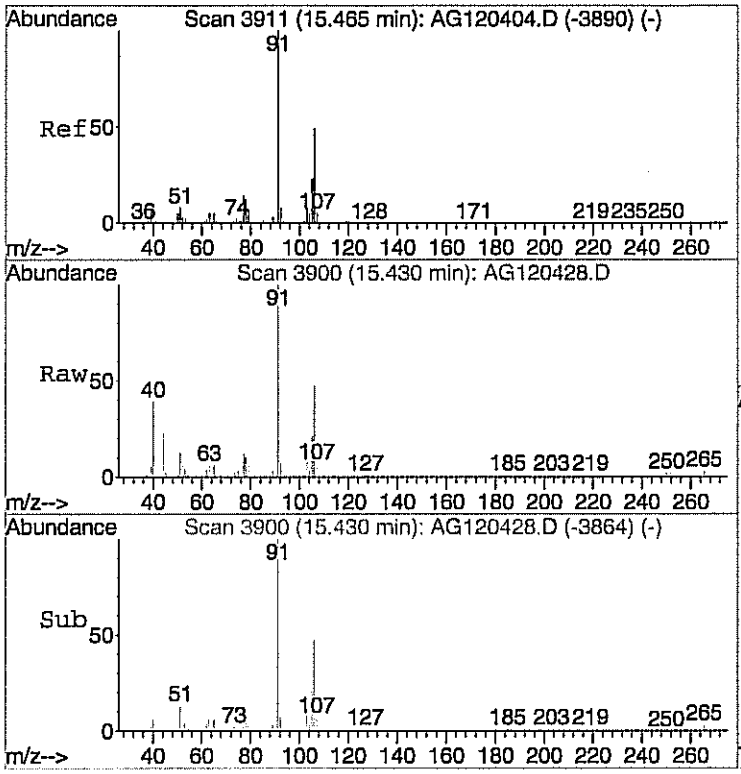


#50
Tetrachloroethylene
Concen: 0.21 ppb
RT: 14.07 min Scan# 3475
Delta R.T. 0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion:164 Resp: 8423

Ion	Ratio	Lower	Upper
164	100		
166	129.9	109.0	149.0

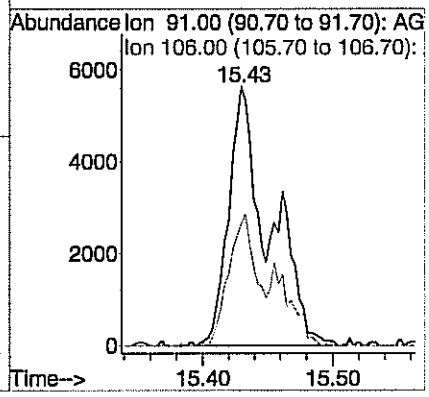


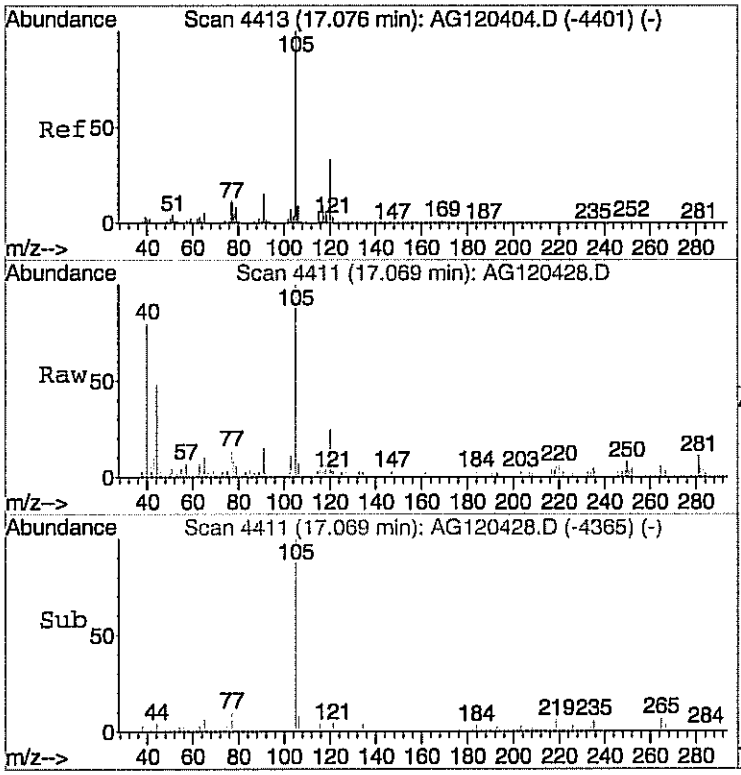


#53
m&p-xylene
Concen: 0.25 ppb
RT: 15.43 min Scan# 3900
Delta R.T. -0.04 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion: 91 Resp: 12121

Ion	Ratio	Lower	Upper
91	100		
106	51.3	29.0	69.0

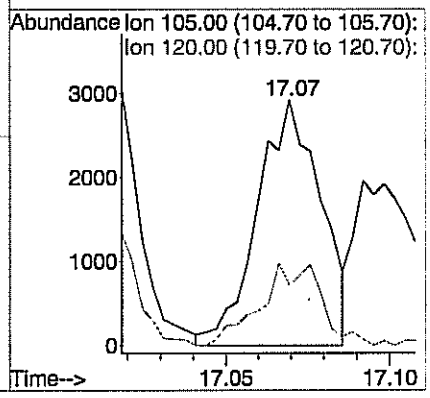


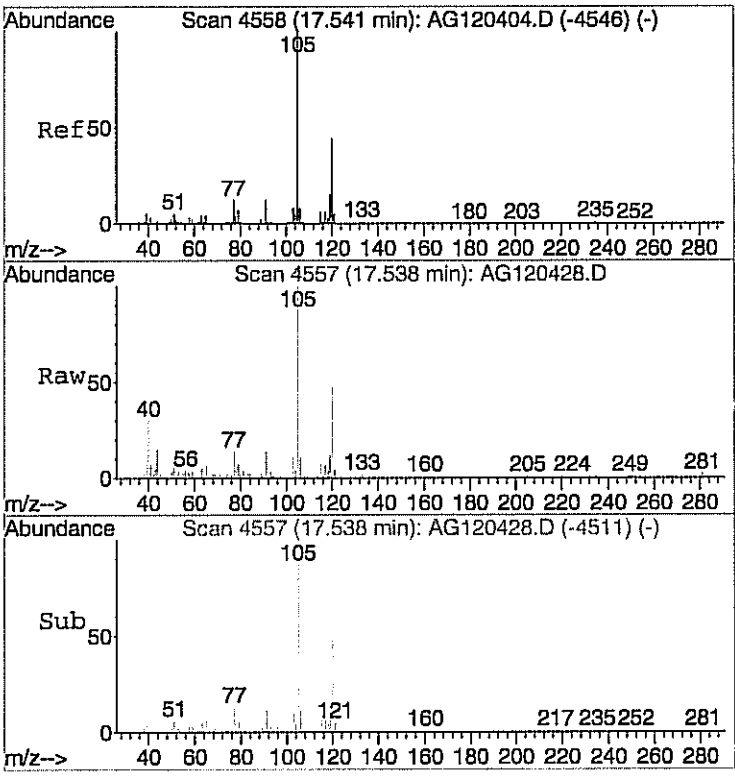


#59
4-ethyltoluene
Concen: 0.12 ppb m
RT: 17.07 min Scan# 4411
Delta R.T. -0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion:105 Resp: 3924

Ion	Ratio	Lower	Upper
105	100		
120	31.9	11.8	51.8

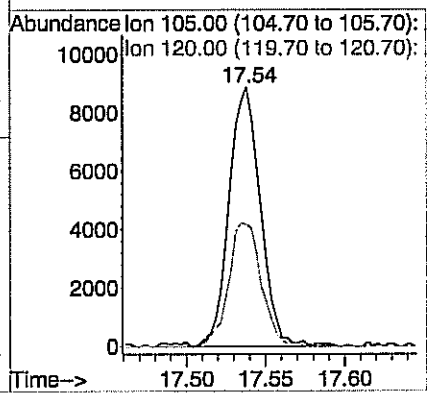




#61
1,2,4-trimethylbenzene
Concen: 0.38 ppb
RT: 17.54 min Scan# 4557
Delta R.T. -0.00 min
Lab File: AG120428.D
Acq: 5 Dec 2009 1:10

Tgt Ion:105 Resp: 12228

Ion	Ratio	Lower	Upper
105	100		
120	49.5	27.4	67.4



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120443.D Vial: 4
Acq On : 5 Dec 2009 9:05 Operator: RJP
Sample : C0912007-003A 10X Inst : MSD #1
Misc : C0912007-003A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 05 09:27:33 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.76	128	21460	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.10	114	42139	1.00	ppb	0.00
44) Chlorobenzene-d5	14.95	117	38818	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	14236	0.80	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 80.00%			
Target Compounds						Qvalue
12) Acetone	4.35	58	6230	0.84	ppb	# 74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

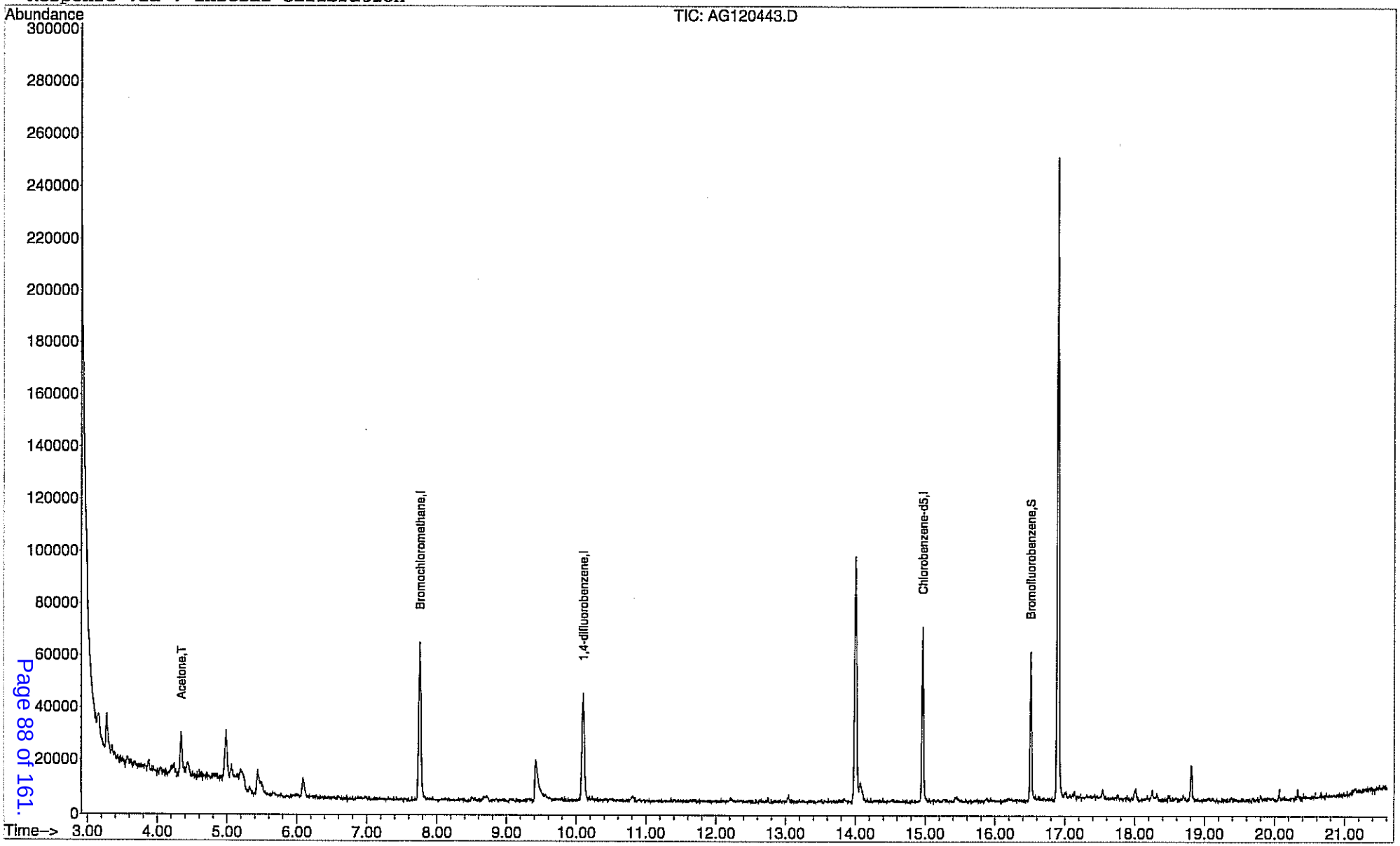
Quantitation Report (QT Reviewed)

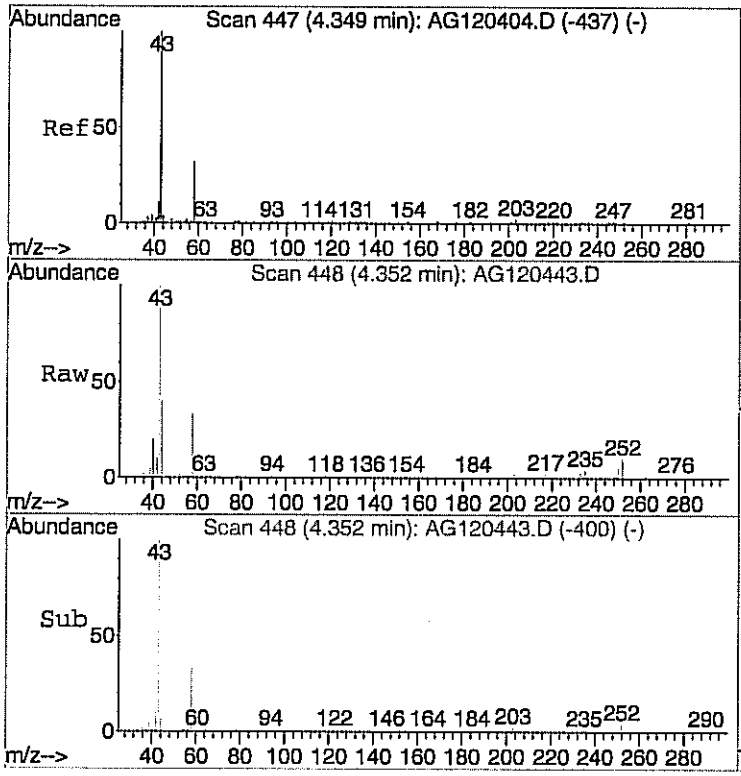
Data File : C:\HPCHEM\1\DATA\AG120443.D
Acq On : 5 Dec 2009 9:05
Sample : C0912007-003A 10X
Misc : C0912007-003A
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:11 2009

Vial: 4
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration

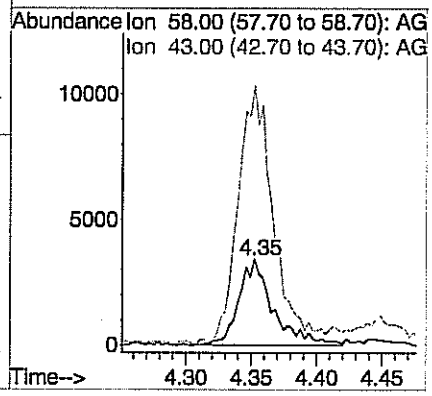




#12
Acetone
Concen: 0.84 ppb
RT: 4.35 min Scan# 448
Delta R.T. 0.00 min
Lab File: AG120443.D
Acq: 5 Dec 2009 9:05

Tgt Ion: 58 Resp: 6230

Ion	Ratio	Lower	Upper
58	100		
43	363.0	398.6	458.6#



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS DATA

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INITIAL CALIBRATION

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration

Calibration Files
0.04 =AG111621.D 0.10 =AG111619.D 0.15 =AG111618.D
0.30 =AG111617.D 0.50 =AG111616.D 0.75 =AG111615.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene			0.758	0.608	0.617	0.595	0.613	10.09
3)	T	Freon 12			6.467	5.222	5.168	4.890	5.150	10.77
4)	T	Chloromethane			1.376	1.141	1.109	1.115	1.120	9.75
5)	T	Freon 114			4.176	3.459	3.467	3.215	3.394	10.00
6)	T	Vinyl Chloride	1.565	1.260	1.213	0.987	0.961	0.927	1.060	20.71
7)	T	1,3-butadiene			1.023	0.930	0.840	0.802	0.847	10.25
8)	T	Bromomethane			1.556	1.246	1.206	1.166	1.212	12.10
9)	T	Chloroethane			0.525	0.387	0.391	0.373	0.393	14.18
10)	T	Vinyl Bromide			1.455	1.183	1.220	1.149	1.202	8.87
11)	T	Freon 11			4.253	3.595	3.622	3.405	3.580	8.18
12)	T	Acetone			0.401	0.386	0.347	0.328	0.346	8.93
13)	T	Isopropyl alcoh			1.408	1.071	0.941	0.850	0.943	22.18
14)	T	1,1-dichloroeth			1.454	1.187	1.115	1.100	1.141	11.92
15)	T	Freon 113			3.088	2.627	2.638	2.405	2.577	8.76
16)	T	Methylene chlor			1.182	0.944	0.962	0.915	0.991	14.83
17)	T	Allyl chloride			1.103	0.895	0.877	0.828	0.872	11.78
18)	T	Carbon disulfid			3.634	2.987	2.948	2.749	3.157	13.81
19)	T	trans-1,2-dichl			1.721	1.398	1.546	1.461	1.456	8.51
20)	T	methyl tert-but			1.801	1.799	1.562	1.683	1.710	6.32
21)	T	1,1-dichloroeth			2.644	2.175	2.213	2.136	2.201	8.37
22)	T	Vinyl acetate			1.025	0.919	0.936	0.908	0.962	5.84
23)	T	Methyl Ethyl Ke			1.504	1.469	1.524	1.583	1.630	9.11
24)	T	cis-1,2-dichlor			1.369	1.115	1.144	1.133	1.182	6.91
25)	T	Hexane			0.906	0.729	0.787	0.775	0.832	8.43
26)	T	Ethyl acetate			1.155	0.960	1.012	1.079	1.109	8.73
27)	T	Chloroform			4.181	3.508	3.510	3.409	3.504	8.24
28)	T	Tetrahydrofuran			0.319	0.396	0.365	0.416	0.422	14.74
29)	T	1,2-dichloroeth			2.283	1.864	1.906	1.797	1.908	8.22
30)	I	1,4-difluorobenzene	----------ISTD----------							
31)	T	1,1,1-trichloro			1.831	1.520	1.477	1.474	1.555	8.01
32)	T	Cyclohexane			0.256	0.275	0.292	0.320	0.333	18.73
33)	T	Carbon tetrachl	3.780	2.525	2.462	1.989	1.963	1.942	2.281	24.90
34)	T	Benzene			1.261	1.153	1.049	1.100	1.194	8.42
35)	T	1,4-dioxane			0.188	0.186	0.157	0.152	0.158	13.00
36)	T	2,2,4-trimethyl			1.018	0.829	0.864	0.904	0.996	13.11
37)	T	Heptane			0.338	0.262	0.264	0.280	0.313	14.71
38)	T	Trichloroethene	1.274	0.889	0.909	0.745	0.784	0.805	0.898	16.32
39)	T	1,2-dichloropro			0.493	0.430	0.426	0.440	0.465	6.82
40)	T	Bromodichlorome			1.717	1.460	1.453	1.466	1.529	6.45
41)	T	cis-1,3-dichlor			0.544	0.494	0.466	0.552	0.571	14.46
42)	T	trans-1,3-dichl			0.480	0.427	0.404	0.421	0.459	9.76
43)	T	1,1,2-trichloro			0.906	0.736	0.719	0.745	0.782	8.09
44)	I	Chlorobenzene-d5	----------ISTD----------							
45)	T	Toluene			0.708	0.710	0.660	0.681	0.767	14.07
46)	T	Methyl Isobutyl				0.554	0.519	0.399	0.439	17.99
47)	T	Dibromochlorome			2.250	1.955	1.941	1.930	1.979	6.09
48)	T	Methyl Butyl Ke			0.484	0.361	0.462	0.348	0.402	11.90
49)	T	1,2-dibromoetha			1.371	1.153	1.240	1.211	1.268	6.18
50)	T	Tetrachloroethy			1.224	1.029	1.055	1.060	1.083	6.34
51)	T	Chlorobenzene			1.534	1.332	1.366	1.355	1.438	7.03
52)	T	Ethylbenzene			1.269	1.126	1.189	1.263	1.398	17.69
53)	T	m&p-xylene			1.007	0.890	1.005	1.141	1.292	26.14
54)	T	Styrene			0.633	0.565	0.634	0.691	0.748	20.91
55)	T	Bromoform			2.119	1.833	1.969	1.986	2.031	5.61

(#) = Out of Range ### Number of calibration levels exceeded format ###

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration

Calibration Files
0.04 =AG111621.D 0.10 =AG111619.D 0.15 =AG111618.D
0.30 =AG111617.D 0.50 =AG111616.D 0.75 =AG111615.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg	%RSD
56)	T	o-xylene			1.448	1.304	1.451	1.267	1.604	19.75
57)	S	Bromofluorobenz	0.379	0.396	0.415	0.435	0.472	0.485	0.461	11.24
58)	T	1,1,2,2-tetrach			1.735	1.493	1.555	1.613	1.661	6.48
59)	T	4-ethyltoluene			0.748	0.669	0.765	0.818	0.899	22.17
60)	T	1,3,5-trimethyl			0.896	0.846	0.868	1.066	1.186	26.75
61)	T	1,2,4-trimethyl			0.768	0.607	0.702	0.757	0.863	21.85
62)	T	1,3-dichloroben			1.075	0.960	1.110	1.215	1.314	20.31
63)	T	benzyl chloride			0.670	0.439	0.504	0.599	0.634	19.25
64)	T	1,4-dichloroben			0.947	0.887	1.051	1.137	1.283	25.58
65)	T	1,2-dichloroben			1.031	0.901	0.968	1.120	1.221	21.47
66)	T	1,2,4-trichloro			0.411	0.373	0.407	0.464	0.483	18.02
67)	T	Naphthalene			0.549	0.388	0.350	0.413	0.433	15.86
68)	T	Hexachloro-1,3-			1.032	0.916	0.990	1.113	1.149	14.75

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111611.D Vial: 2
Acq On : 16 Nov 2009 20:23 Operator: RJP
Sample : A1UT_2.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:20:01 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17824	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	39814	1.00	ppb		0.00
44) Chlorobenzene-d5	14.95	117	37720	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.51	95	20113	1.09	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 109.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	20919	2.00	ppb		89
3) Freon 12	3.00	85	174631	1.98	ppb		98
4) Chloromethane	3.14	50	37669	2.00	ppb		98
5) Freon 114	3.14	85	115122	1.96	ppb		99
6) Vinyl Chloride	3.28	62	31965	1.82	ppb		100
7) 1,3-butadiene	3.36	39	28056	1.90	ppb		77
8) Bromomethane	3.61	94	39303	1.88	ppb		95
9) Chloroethane	3.74	64	13143	1.84	ppb		96
10) Vinyl Bromide	3.99	106	41375	1.96	ppb		99
11) Freon 11	4.20	101	124053	1.95	ppb		99
12) Acetone	4.34	58	11709	1.94	ppb	#	85
13) Isopropyl alcohol	4.44	45	29376	2.05	ppb	#	40
14) 1,1-dichloroethene	4.81	96	38575	1.93	ppb		92
15) Freon 113	4.99	101	89209	1.98	ppb		99
16) Methylene chloride	5.21	84	44964	2.77	ppb	#	84
17) Allyl chloride	5.20	41	31496	2.18	ppb		87
18) Carbon disulfide	5.34	76	134328	2.61	ppb		98
19) trans-1,2-dichloroethene	6.06	61	49805	2.00	ppb		89
20) methyl tert-butyl ether	6.11	73	66630	2.24	ppb		93
21) 1,1-dichloroethane	6.45	63	76592	2.02	ppb		99
22) Vinyl acetate	6.48	43	37956	2.25	ppb		97
23) Methyl Ethyl Ketone	6.97	43	68684	2.31	ppb		98
24) cis-1,2-dichloroethene	7.34	61	43109	2.04	ppb		92
25) Hexane	6.97	41	33428	2.27	ppb		92
26) Ethyl acetate	7.54	43	45112	2.30	ppb		99
27) Chloroform	7.93	83	121879	1.98	ppb		98
28) Tetrahydrofuran	8.11	42	18378	2.36	ppb		98
29) 1,2-dichloroethane	9.01	62	67182	2.00	ppb		99
31) 1,1,1-trichloroethane	8.71	97	128926	2.05	ppb		99
32) Cyclohexane	9.42	56	35717	2.53	ppb		96
33) Carbon tetrachloride	9.36	117	169386	2.02	ppb		99
34) Benzene	9.32	78	109625	2.32	ppb		94
35) 1,4-dioxane	11.14	88	12882m	2.53	ppb		
36) 2,2,4-trimethylpentane	10.30	57	98631	2.36	ppb		97
37) Heptane	10.72	43	31886	2.47	ppb		97
38) Trichloroethene	10.81	130	75934	2.11	ppb		99
39) 1,2-dichloropropane	10.93	63	40543	2.06	ppb		100
40) Bromodichloromethane	11.31	83	129919	2.09	ppb		100
41) cis-1,3-dichloropropene	12.20	75	58825	2.57	ppb		99
42) trans-1,3-dichloropropene	13.00	75	43500	2.34	ppb		98
43) 1,1,2-trichloroethane	13.30	97	66654	2.08	ppb		97
45) Toluene	13.05	92	74962	2.52	ppb		99
46) Methyl Isobutyl Ketone	12.16	43	36620	2.74	ppb		97
47) Dibromochloromethane	13.98	129	151621	2.01	ppb		99
48) Methyl Butyl Ketone	13.53	43	28408	1.95	ppb		95
49) 1,2-dibromoethane	14.22	107	102904	2.05	ppb		98
50) Tetrachloroethylene	14.07	164	85579	2.05	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111611.D Vial: 2
Acq On : 16 Nov 2009 20:23 Operator: RJP
Sample : A1UT_2.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:20:01 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

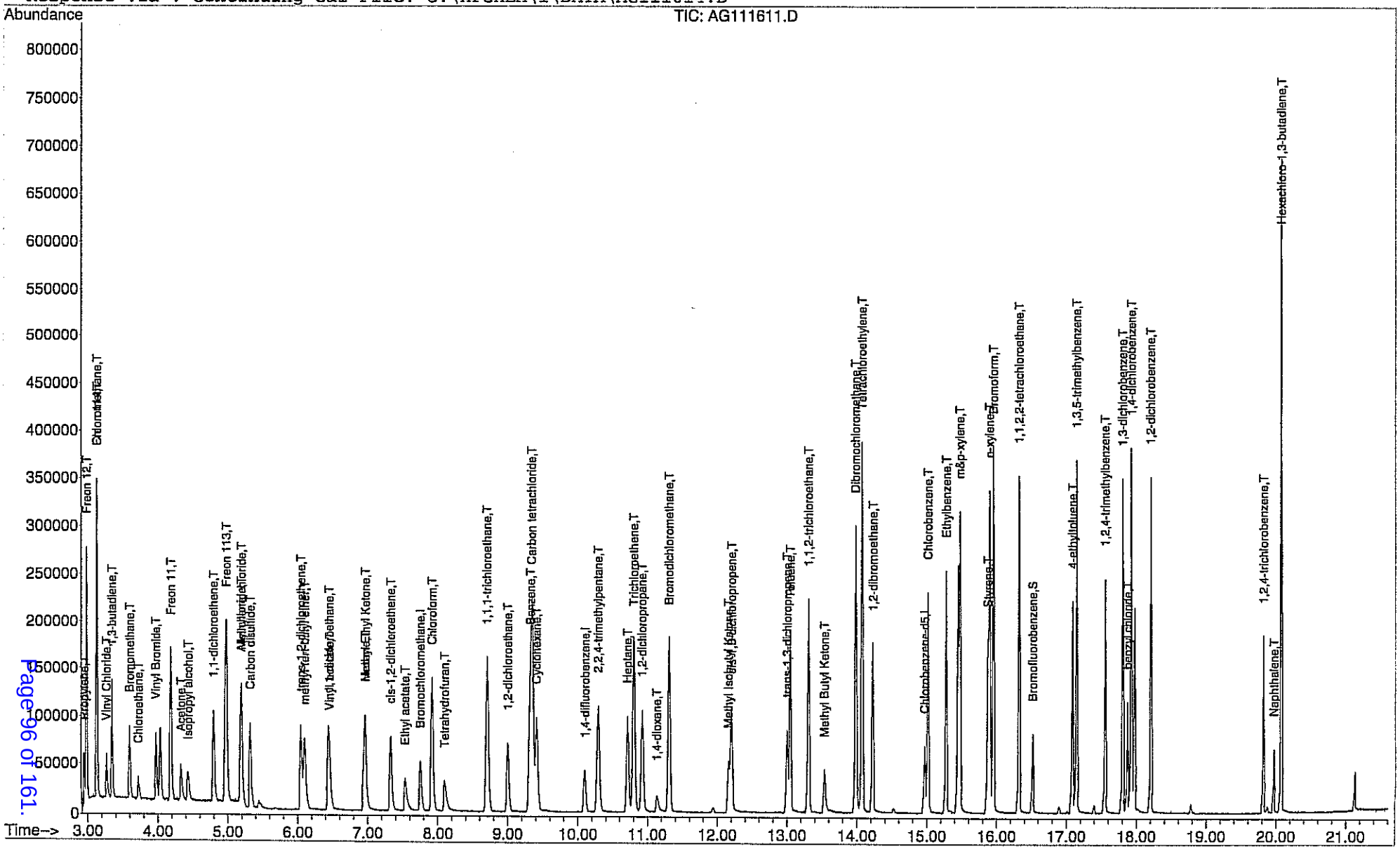
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	120918	2.12	ppb	98
52)	Ethylbenzene	15.27	91	143005	2.56	ppb	98
53)	m&p-xylene	15.47	91	282690	5.29	ppb	100
54)	Styrene	15.86	104	80027	2.69	ppb	99
55)	Bromoform	15.95	173	164167	2.02	ppb	100
56)	o-xylene	15.89	91	167677	2.76	ppb	94
58)	1,1,2,2-tetrachloroethane	16.31	83	136387	2.05	ppb	98
59)	4-ethyltoluene	17.08	105	97466m	2.84	ppb	
60)	1,3,5-trimethylbenzene	17.13	105	129572m	2.58	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	87066m	2.57	ppb	
62)	1,3-dichlorobenzene	17.79	146	132529	2.44	ppb	99
63)	benzyl chloride	17.86	91	63041	2.55	ppb	100
64)	1,4-dichlorobenzene	17.91	146	137542	2.56	ppb	98
65)	1,2-dichlorobenzene	18.19	146	126936	2.51	ppb	98
66)	1,2,4-trichlorobenzene	19.81	180	48247	2.42	ppb	95
67)	Naphthalene	19.96	128	39560	2.57	ppb	99
68)	Hexachloro-1,3-butadiene	20.07	225	107533	2.19	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111611.D Vial: 2
Acq On : 16 Nov 2009 20:23 Operator: RJP
Sample : A1UT_2.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:35 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111612.D Vial: 3
Acq On : 16 Nov 2009 20:57 Operator: RJP
Sample : A1UT_1.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:00 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17738	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	41286	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	37686	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.51	95	19403	1.06	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 106.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	15884	1.53	ppb		85
3) Freon 12	3.00	85	127144	1.45	ppb		98
4) Chloromethane	3.14	50	28305	1.51	ppb		97
5) Freon 114	3.14	85	84890	1.45	ppb		99
6) Vinyl Chloride	3.28	62	24083	1.38	ppb		100
7) 1,3-butadiene	3.36	39	20527	1.40	ppb		73
8) Bromomethane	3.61	94	30052	1.44	ppb		100
9) Chloroethane	3.74	64	9270	1.30	ppb		99
10) Vinyl Bromide	3.99	106	30461	1.45	ppb		97
11) Freon 11	4.20	101	90245	1.42	ppb		99
12) Acetone	4.35	58	8385	1.40	ppb	#	78
13) Isopropyl alcohol	4.45	45	22492	1.58	ppb		97
14) 1,1-dichloroethene	4.81	96	27533	1.38	ppb		93
15) Freon 113	4.99	101	63918	1.43	ppb		97
16) Methylene chloride	5.21	84	23241	1.44	ppb		94
17) Allyl chloride	5.20	41	20569	1.43	ppb		93
18) Carbon disulfide	5.33	76	71379	1.39	ppb		99
19) trans-1,2-dichloroethene	6.06	61	37232	1.50	ppb		90
20) methyl tert-butyl ether	6.12	73	45544	1.54	ppb		91
21) 1,1-dichloroethane	6.45	63	55709	1.48	ppb		99
22) Vinyl acetate	6.48	43	25954	1.54	ppb		99
23) Methyl Ethyl Ketone	6.97	43	45999	1.55	ppb		97
24) cis-1,2-dichloroethene	7.34	61	31155	1.48	ppb		96
25) Hexane	6.97	41	23251	1.58	ppb		97
26) Ethyl acetate	7.55	43	31638	1.62	ppb		98
27) Chloroform	7.93	83	87853	1.43	ppb		97
28) Tetrahydrofuran	8.11	42	12560	1.62	ppb		97
29) 1,2-dichloroethane	9.01	62	48804	1.46	ppb		100
31) 1,1,1-trichloroethane	8.71	97	91602	1.41	ppb		99
32) Cyclohexane	9.42	56	23624	1.61	ppb		94
33) Carbon tetrachloride	9.36	117	122231	1.41	ppb		100
34) Benzene	9.32	78	76360	1.56	ppb		96
35) 1,4-dioxane	11.14	88	9178	1.74	ppb		100
36) 2,2,4-trimethylpentane	10.30	57	64964	1.50	ppb		96
37) Heptane	10.72	43	20506	1.53	ppb		98
38) Trichloroethene	10.80	130	53333	1.43	ppb		99
39) 1,2-dichloropropane	10.93	63	28845	1.41	ppb		100
40) Bromodichloromethane	11.31	83	90855	1.41	ppb		98
41) cis-1,3-dichloropropene	12.20	75	37486	1.58	ppb		100
42) trans-1,3-dichloropropene	13.00	75	29463	1.53	ppb		99
43) 1,1,2-trichloroethane	13.30	97	46500	1.40	ppb		96
45) Toluene	13.04	92	46968	1.58	ppb		100
46) Methyl Isobutyl Ketone	12.16	43	21157	1.58	ppb		99
47) Dibromochloromethane	13.98	129	106125	1.41	ppb		99
48) Methyl Butyl Ketone	13.54	43	22988m	1.58	ppb		
49) 1,2-dibromoethane	14.22	107	70898	1.42	ppb		99
50) Tetrachloroethylene	14.07	164	58984	1.42	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111612.D Vial: 3
Acq On : 16 Nov 2009 20:57 Operator: RJP
Sample : A1UT_1.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:00 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

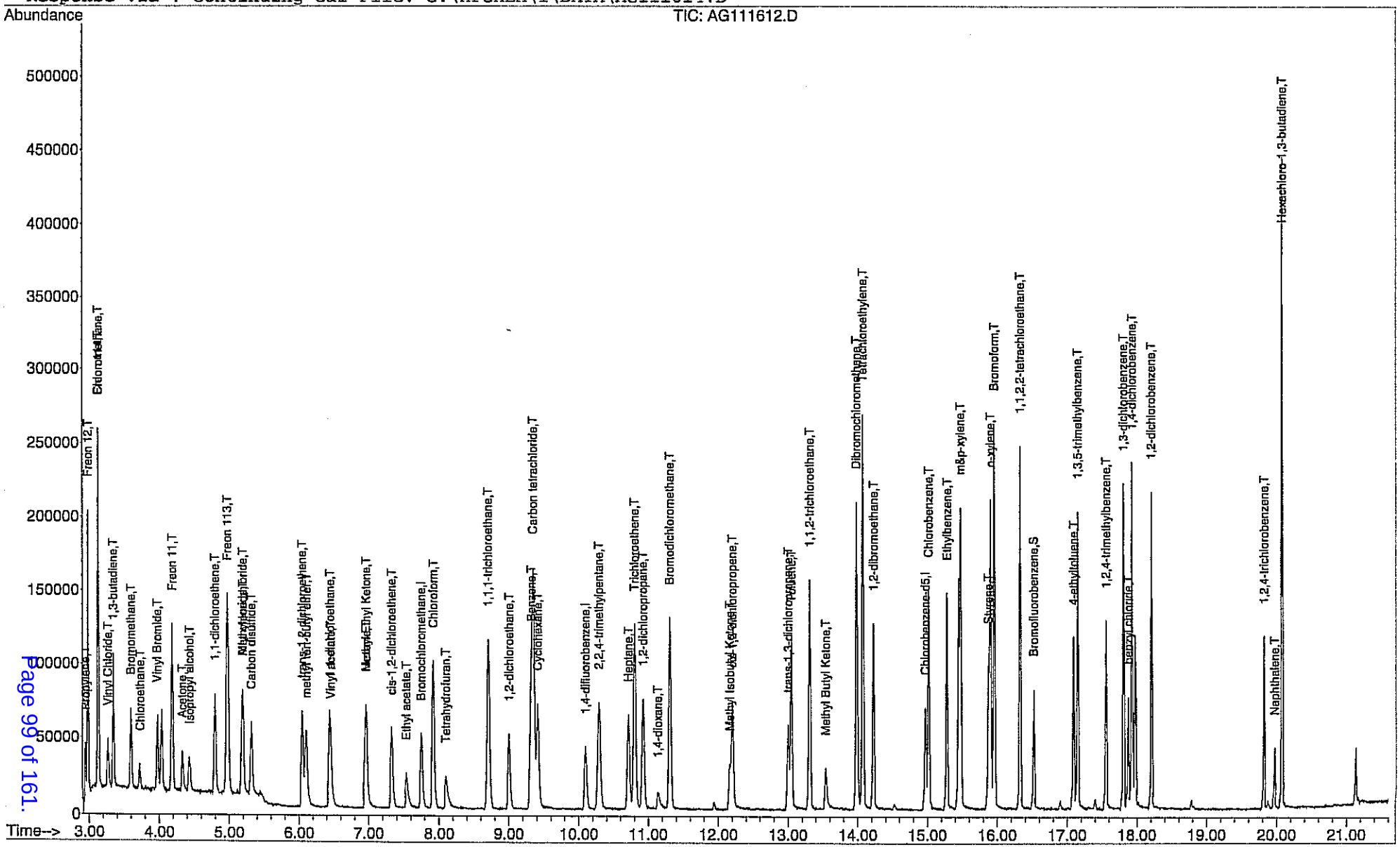
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
51)	Chlorobenzene	15.01	112	81251	1.42 ppb	97
52)	Ethylbenzene	15.27	91	87130	1.56 ppb	99
53)	m&p-xylene	15.46	91	176653	3.31 ppb	100
54)	Styrene	15.86	104	47399	1.59 ppb	100
55)	Bromoform	15.95	173	113941	1.40 ppb	99
56)	o-xylene	15.89	91	104936	1.73 ppb	98
58)	1,1,2,2-tetrachloroethane	16.31	83	94926	1.43 ppb	99
59)	4-ethyltoluene	17.07	105	59175	1.72 ppb	99
60)	1,3,5-trimethylbenzene	17.13	105	81952m	1.63 ppb	
61)	1,2,4-trimethylbenzene	17.54	105	60640	1.79 ppb	96
62)	1,3-dichlorobenzene	17.79	146	84173	1.55 ppb	100
63)	benzyl chloride	17.86	91	39558	1.60 ppb	100
64)	1,4-dichlorobenzene	17.91	146	87419	1.63 ppb	99
65)	1,2-dichlorobenzene	18.19	146	77803	1.54 ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	29929	1.51 ppb	99
67)	Naphthalene	19.96	128	24365	1.59 ppb	99
68)	Hexachloro-1,3-butadiene	20.07	225	68631	1.40 ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111612.D Vial: 3
Acq On : 16 Nov 2009 20:57 Operator: RJP
Sample : A1UT_1.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:35 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111613.D Vial: 4
Acq On : 16 Nov 2009 21:31 Operator: RJP
Sample : A1UT_1.25 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:10 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17602	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	41201	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	37732	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	18516	1.01	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 101.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	12138	1.18	ppb		92
3) Freon 12	3.00	85	106123	1.22	ppb		98
4) Chloromethane	3.14	50	22922	1.23	ppb		98
5) Freon 114	3.14	85	68679	1.18	ppb		97
6) Vinyl Chloride	3.28	62	19777	1.14	ppb		96
7) 1,3-butadiene	3.36	39	17402	1.19	ppb		72
8) Bromomethane	3.61	94	24599	1.19	ppb		100
9) Chloroethane	3.74	64	7823	1.11	ppb		100
10) Vinyl Bromide	3.99	106	24640	1.18	ppb		99
11) Freon 11	4.20	101	72985	1.16	ppb		99
12) Acetone	4.35	58	7181	1.21	ppb	#	80
13) Isopropyl alcohol	4.45	45	17518	1.24	ppb		97
14) 1,1-dichloroethene	4.81	96	22696	1.15	ppb		93
15) Freon 113	4.99	101	53514	1.21	ppb		100
16) Methylene chloride	5.22	84	19338	1.21	ppb		91
17) Allyl chloride	5.20	41	17760	1.25	ppb		94
18) Carbon disulfide	5.33	76	79120	1.56	ppb		97
19) trans-1,2-dichloroethene	6.06	61	29289	1.19	ppb		88
20) methyl tert-butyl ether	6.12	73	34868	1.19	ppb		90
21) 1,1-dichloroethane	6.45	63	45615	1.22	ppb		99
22) Vinyl acetate	6.48	43	20273	1.22	ppb		98
23) Methyl Ethyl Ketone	6.97	43	36118	1.23	ppb		96
24) cis-1,2-dichloroethene	7.34	61	24875	1.19	ppb		94
25) Hexane	6.97	41	18090	1.24	ppb		96
26) Ethyl acetate	7.55	43	24441	1.26	ppb		97
27) Chloroform	7.93	83	71488	1.18	ppb		97
28) Tetrahydrofuran	8.11	42	9995m	1.30	ppb		
29) 1,2-dichloroethane	9.01	62	39736	1.20	ppb		99
31) 1,1,1-trichloroethane	8.72	97	75426	1.16	ppb		100
32) Cyclohexane	9.43	56	17381	1.19	ppb	#	86
33) Carbon tetrachloride	9.36	117	100192	1.16	ppb		100
34) Benzene	9.32	78	61308	1.25	ppb		94
35) 1,4-dioxane	11.14	88	7415	1.41	ppb		92
36) 2,2,4-trimethylpentane	10.30	57	52341	1.21	ppb		97
37) Heptane	10.72	43	15716	1.18	ppb		94
38) Trichloroethene	10.80	130	43911	1.18	ppb		98
39) 1,2-dichloropropane	10.92	63	23569	1.16	ppb		97
40) Bromodichloromethane	11.31	83	75982	1.18	ppb		100
41) cis-1,3-dichloropropene	12.20	75	30498	1.29	ppb		99
42) trans-1,3-dichloropropene	13.00	75	23247	1.21	ppb		95
43) 1,1,2-trichloroethane	13.30	97	38936	1.17	ppb		97
45) Toluene	13.04	92	36160	1.22	ppb		98
46) Methyl Isobutyl Ketone	12.16	43	18258	1.36	ppb		97
47) Dibromochloromethane	13.97	129	88210	1.17	ppb		99
48) Methyl Butyl Ketone	13.54	43	18356m	1.26	ppb		
49) 1,2-dibromoethane	14.22	107	57600	1.15	ppb		98
50) Tetrachloroethylene	14.06	164	47976	1.15	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111613.D Vial: 4
Acq On : 16 Nov 2009 21:31 Operator: RJP
Sample : A1UT_1.25 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:10 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

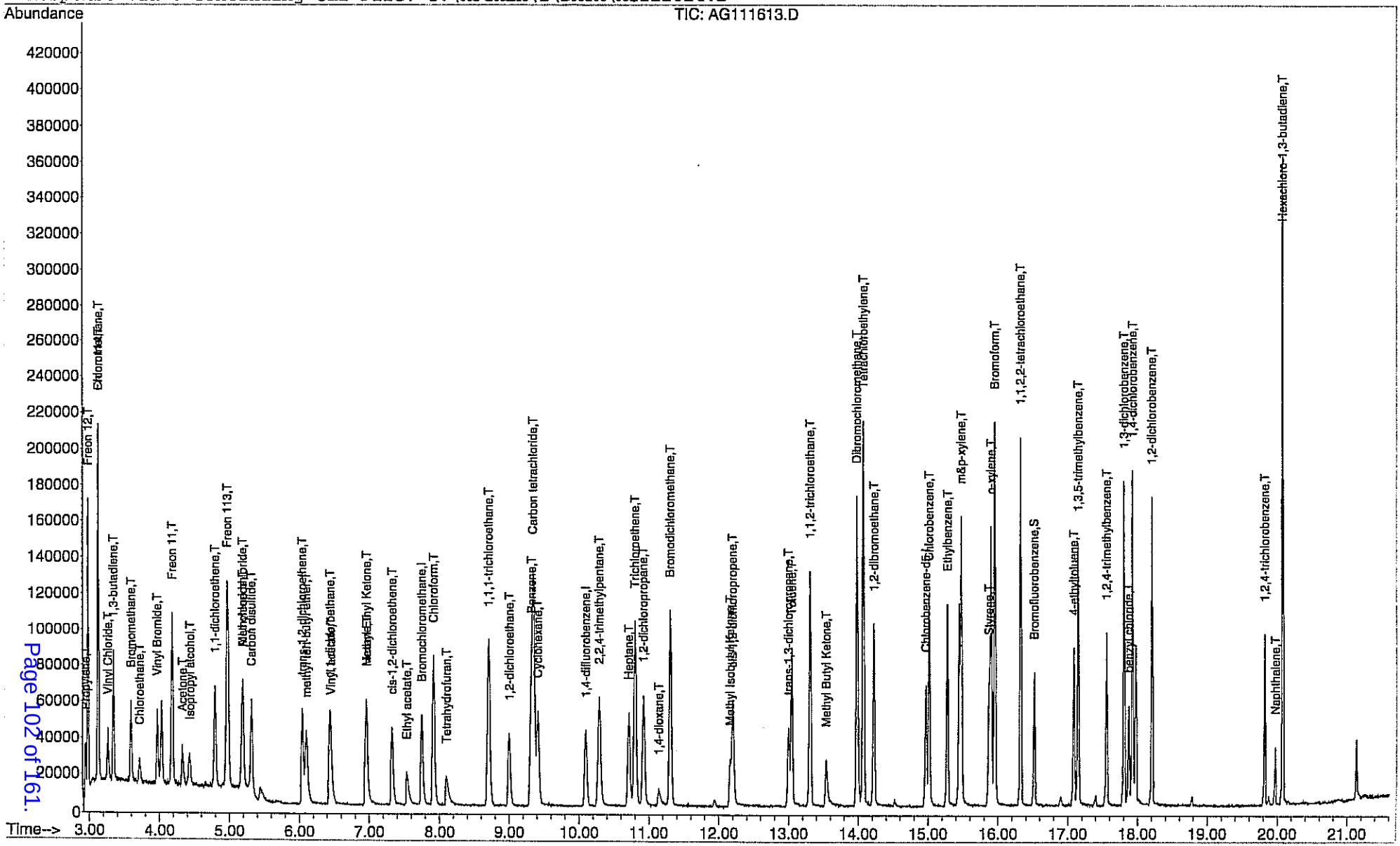
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	64196	1.12	ppb	98
52)	Ethylbenzene	15.27	91	66804	1.19	ppb	98
53)	m&p-xylene	15.46	91	136070	2.54	ppb	99
54)	Styrene	15.86	104	36345	1.22	ppb	99
55)	Bromoform	15.95	173	94128	1.16	ppb	99
56)	o-xylene	15.89	91	78767	1.30	ppb	96
58)	1,1,2,2-tetrachloroethane	16.31	83	77219	1.16	ppb	99
59)	4-ethyltoluene	17.08	105	44290	1.29	ppb	99
60)	1,3,5-trimethylbenzene	17.14	105	62122m	1.24	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	44501	1.31	ppb	96
62)	1,3-dichlorobenzene	17.79	146	69093	1.27	ppb	99
63)	benzyl chloride	17.86	91	31390	1.27	ppb	100
64)	1,4-dichlorobenzene	17.91	146	68497	1.28	ppb	99
65)	1,2-dichlorobenzene	18.19	146	63704	1.26	ppb	100
66)	1,2,4-trichlorobenzene	19.81	180	24265	1.22	ppb	96
67)	Naphthalene	19.96	128	18750	1.22	ppb	97
68)	Hexachloro-1,3-butadiene	20.07	225	56739	1.16	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111613.D Vial: 4
Acq On : 16 Nov 2009 21:31 Operator: RJP
Sample : A1UT_1.25 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:36 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111614.D Vial: 5
Acq On : 16 Nov 2009 22:04 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:15:48 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17508	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	40334	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	36229	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.51	95	17674	1.00	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	10274	1.00	ppb		91
3) Freon 12	3.00	85	86760	1.00	ppb		100
4) Chloromethane	3.14	50	18506	1.00	ppb		95
5) Freon 114	3.14	85	57667	1.00	ppb		98
6) Vinyl Chloride	3.28	62	17223	1.00	ppb		97
7) 1,3-butadiene	3.36	39	14510	1.00	ppb		75
8) Bromomethane	3.61	94	20578	1.00	ppb		95
9) Chloroethane	3.74	64	7014	1.00	ppb		96
10) Vinyl Bromide	3.99	106	20721	1.00	ppb		97
11) Freon 11	4.20	101	62630	1.00	ppb		99
12) Acetone	4.35	58	5923	1.00	ppb	#	85
13) Isopropyl alcohol	4.45	45	14091	1.00	ppb	#	40
14) 1,1-dichloroethene	4.81	96	19661	1.00	ppb		91
15) Freon 113	4.99	101	44171	1.00	ppb		97
16) Methylene chloride	5.22	84	15936	1.00	ppb		94
17) Allyl chloride	5.20	41	14186	1.00	ppb		93
18) Carbon disulfide	5.33	76	50579	1.00	ppb		99
19) trans-1,2-dichloroethene	6.06	61	24431	1.00	ppb		88
20) methyl tert-butyl ether	6.12	73	29187	1.00	ppb		90
21) 1,1-dichloroethane	6.45	63	37251	1.00	ppb		100
22) Vinyl acetate	6.48	43	16591	1.00	ppb		98
23) Methyl Ethyl Ketone	6.96	43	29149	1.00	ppb		95
24) cis-1,2-dichloroethene	7.34	61	20795	1.00	ppb		95
25) Hexane	6.98	41	14494	1.00	ppb		95
26) Ethyl acetate	7.55	43	19278	1.00	ppb		97
27) Chloroform	7.93	83	60511	1.00	ppb		97
28) Tetrahydrofuran	8.11	42	7642	1.00	ppb		96
29) 1,2-dichloroethane	9.01	62	33055	1.00	ppb		100
31) 1,1,1-trichloroethane	8.71	97	63645	1.00	ppb		99
32) Cyclohexane	9.42	56	14323	1.00	ppb	#	89
33) Carbon tetrachloride	9.36	117	84765	1.00	ppb		99
34) Benzene	9.32	78	47943	1.00	ppb		95
35) 1,4-dioxane	11.15	88	5153	1.00	ppb		91
36) 2,2,4-trimethylpentane	10.30	57	42331	1.00	ppb		96
37) Heptane	10.71	43	13055	1.00	ppb		98
38) Trichloroethene	10.80	130	36398	1.00	ppb		99
39) 1,2-dichloropropane	10.93	63	19949	1.00	ppb		98
40) Bromodichloromethane	11.31	83	63005	1.00	ppb		98
41) cis-1,3-dichloropropene	12.20	75	23226	1.00	ppb		99
42) trans-1,3-dichloropropene	12.99	75	18849	1.00	ppb		89
43) 1,1,2-trichloroethane	13.30	97	32450	1.00	ppb		98
45) Toluene	13.04	92	28521	1.00	ppb		98
46) Methyl Isobutyl Ketone	12.17	43	12853	1.00	ppb		96
47) Dibromochloromethane	13.97	129	72469	1.00	ppb		100
48) Methyl Butyl Ketone	13.54	43	14050	1.01	ppb		99
49) 1,2-dibromoethane	14.22	107	48102	1.00	ppb		99
50) Tetrachloroethylene	14.06	164	40008	1.00	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111614.D Vial: 5
Acq On : 16 Nov 2009 22:04 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:15:48 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

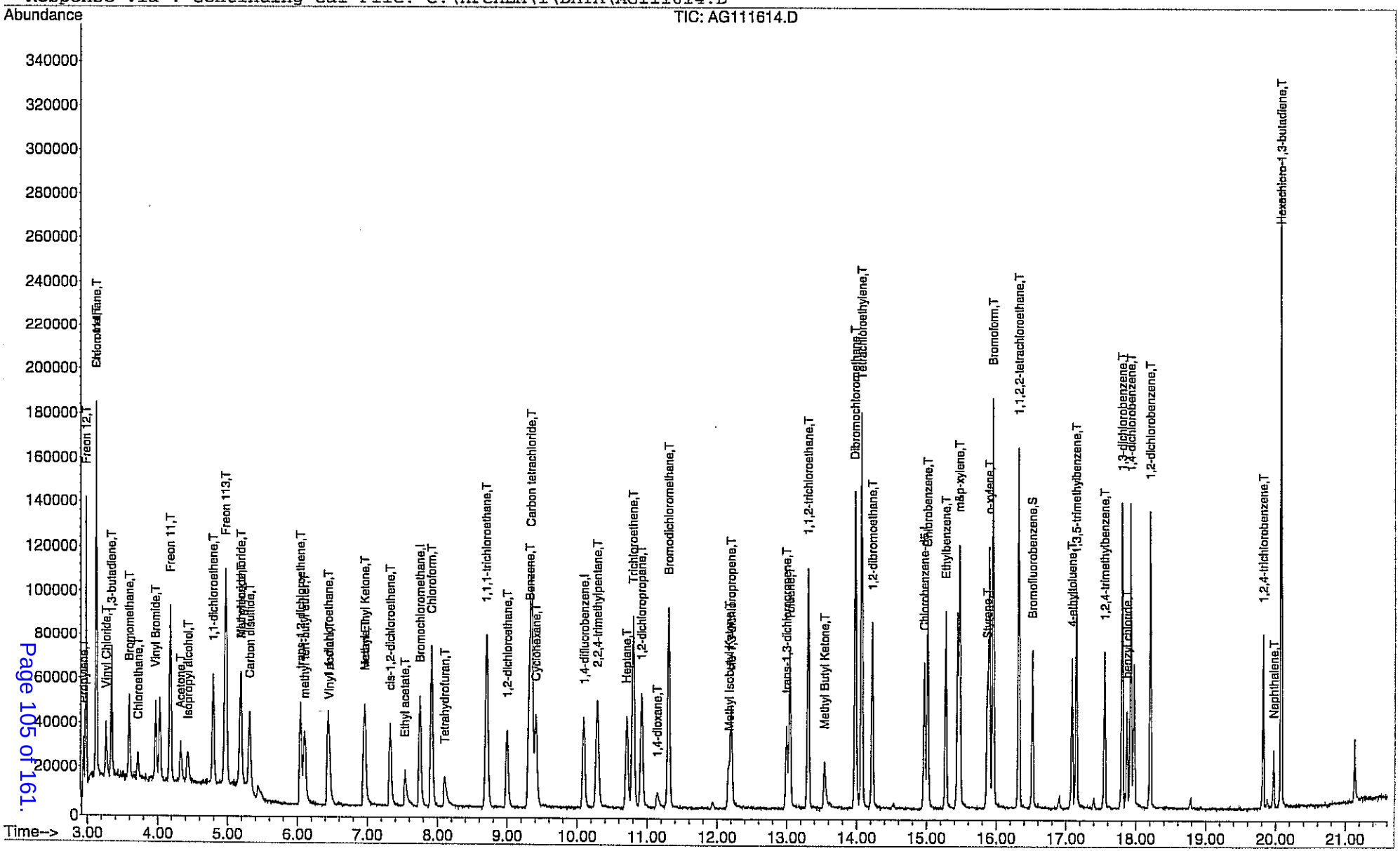
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	54860	1.00	ppb	97
52)	Ethylbenzene	15.27	91	53679	1.00	ppb	99
53)	m&p-xylene	15.46	91	102673	2.00	ppb	100
54)	Styrene	15.86	104	28581	1.00	ppb	100
55)	Bromoform	15.94	173	78116	1.00	ppb	100
56)	o-xylene	15.89	91	58391	1.00	ppb	95
58)	1,1,2,2-tetrachloroethane	16.31	83	64016	1.00	ppb	98
59)	4-ethyltoluene	17.07	105	32982	1.00	ppb	98
60)	1,3,5-trimethylbenzene	17.13	105	48209	1.00	ppb	97
61)	1,2,4-trimethylbenzene	17.54	105	32576	1.00	ppb	95
62)	1,3-dichlorobenzene	17.79	146	52134	1.00	ppb	99
63)	benzyl chloride	17.86	91	23762	1.00	ppb	99
64)	1,4-dichlorobenzene	17.91	146	51519	1.00	ppb	99
65)	1,2-dichlorobenzene	18.19	146	48576	1.00	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	19116	1.00	ppb	100
67)	Naphthalene	19.96	128	14772	1.00	ppb	97
68)	Hexachloro-1,3-butadiene	20.07	225	47109	1.00	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111614.D Vial: 5
Acq On : 16 Nov 2009 22:04 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:15 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111615.D Vial: 6
Acq On : 16 Nov 2009 22:36 Operator: RJP
Sample : A1UT_0.75 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:39 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.77	128	17524	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	40682	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	36271	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	17595	0.99	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 99.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	7823	0.76	ppb		84
3) Freon 12	3.00	85	64272	0.74	ppb		100
4) Chloromethane	3.14	50	14657	0.79	ppb		99
5) Freon 114	3.14	85	42259	0.73	ppb		98
6) Vinyl Chloride	3.28	62	12179	0.71	ppb		99
7) 1,3-butadiene	3.36	39	10541	0.73	ppb		78
8) Bromomethane	3.61	94	15319	0.74	ppb		99
9) Chloroethane	3.74	64	4898	0.70	ppb		92
10) Vinyl Bromide	3.99	106	15099	0.73	ppb		97
11) Freon 11	4.20	101	44753	0.71	ppb		99
12) Acetone	4.35	58	4309	0.73	ppb	#	86
13) Isopropyl alcohol	4.45	45	11169	0.79	ppb		95
14) 1,1-dichloroethene	4.81	96	14459m	0.73	ppb		
15) Freon 113	4.99	101	31614	0.72	ppb		97
16) Methylene chloride	5.21	84	12021	0.75	ppb		89
17) Allyl chloride	5.20	41	10884	0.77	ppb		98
18) Carbon disulfide	5.33	76	36126	0.71	ppb		100
19) trans-1,2-dichloroethene	6.06	61	19199	0.79	ppb		84
20) methyl tert-butyl ether	6.12	73	22114	0.76	ppb		90
21) 1,1-dichloroethane	6.45	63	28074	0.75	ppb		100
22) Vinyl acetate	6.48	43	11928	0.72	ppb		100
23) Methyl Ethyl Ketone	6.97	43	20806	0.71	ppb		94
24) cis-1,2-dichloroethene	7.34	61	14891	0.72	ppb		94
25) Hexane	6.97	41	10186	0.70	ppb		93
26) Ethyl acetate	7.55	43	14183	0.74	ppb		97
27) Chloroform	7.93	83	44799	0.74	ppb		99
28) Tetrahydrofuran	8.11	42	5465	0.71	ppb		94
29) 1,2-dichloroethane	9.01	62	23620	0.71	ppb		100
31) 1,1,1-trichloroethane	8.71	97	44970	0.70	ppb		98
32) Cyclohexane	9.42	56	9751	0.67	ppb	#	88
33) Carbon tetrachloride	9.35	117	59253	0.69	ppb		100
34) Benzene	9.32	78	33574	0.69	ppb		97
35) 1,4-dioxane	11.15	88	4635	0.89	ppb		92
36) 2,2,4-trimethylpentane	10.29	57	27568	0.65	ppb		97
37) Heptane	10.72	43	8552	0.65	ppb		100
38) Trichloroethene	10.81	130	24568	0.67	ppb		99
39) 1,2-dichloropropane	10.93	63	13431	0.67	ppb		97
40) Bromodichloromethane	11.31	83	44733	0.70	ppb		99
41) cis-1,3-dichloropropene	12.20	75	16828	0.72	ppb		100
42) trans-1,3-dichloropropene	13.00	75	12834	0.68	ppb		98
43) 1,1,2-trichloroethane	13.30	97	22725	0.69	ppb		100
45) Toluene	13.04	92	18523	0.65	ppb		100
46) Methyl Isobutyl Ketone	12.16	43	10850m	0.84	ppb		
47) Dibromochloromethane	13.98	129	52490	0.72	ppb		98
48) Methyl Butyl Ketone	13.54	43	9454	0.68	ppb		89
49) 1,2-dibromoethane	14.22	107	32953	0.68	ppb		99
50) Tetrachloroethylene	14.06	164	28835	0.72	ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111615.D Vial: 6
Acq On : 16 Nov 2009 22:36 Operator: RJP
Sample : A1UT_0.75 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:39 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

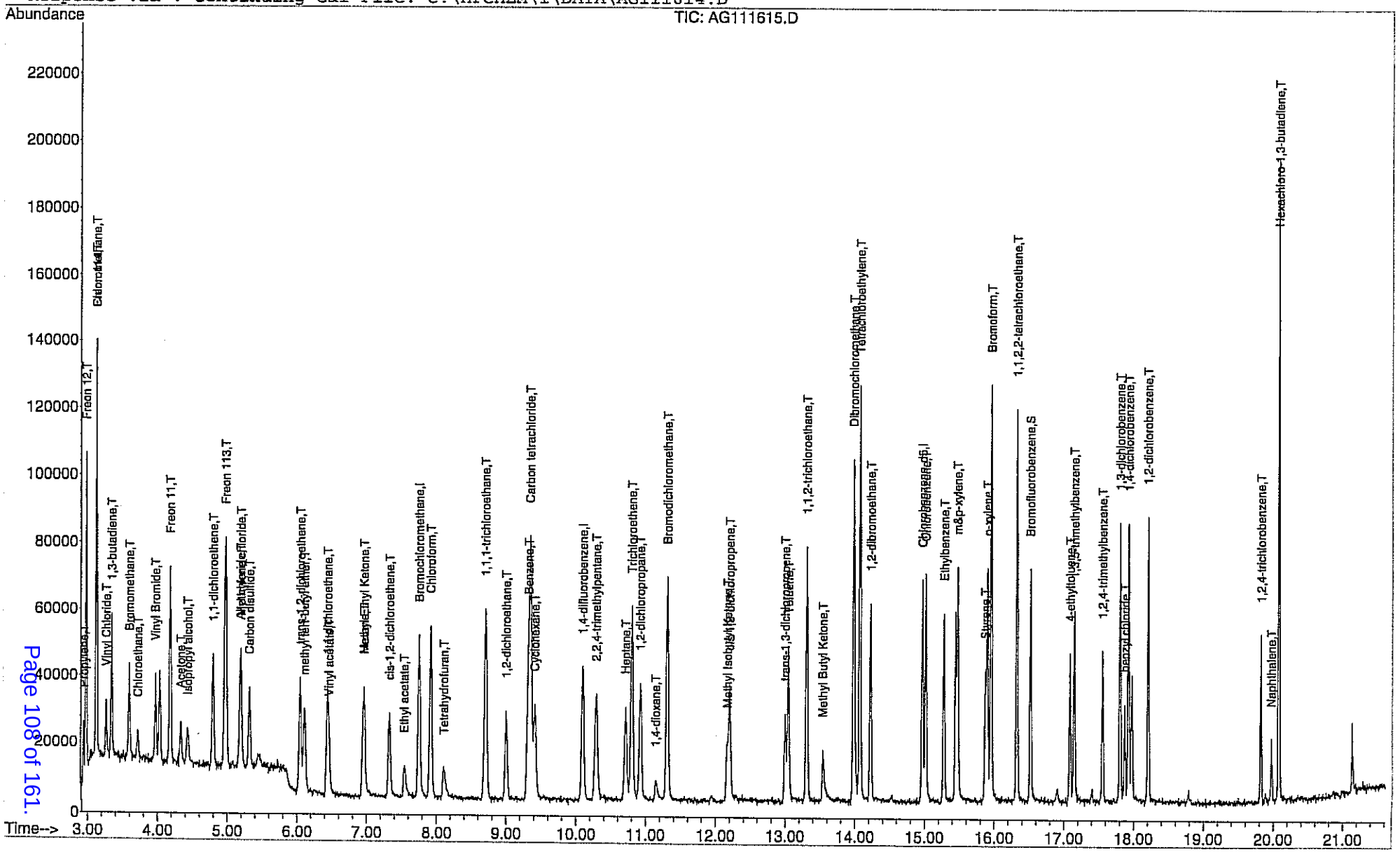
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.00	112	36856	0.67	ppb	97
52)	Ethylbenzene	15.27	91	34362	0.64	ppb	100
53)	m&p-xylene	15.46	91	62058	1.21	ppb	99
54)	Styrene	15.86	104	18797	0.66	ppb	96
55)	Bromoform	15.95	173	54033	0.69	ppb	100
56)	o-xylene	15.89	91	34458	0.59	ppb	99
58)	1,1,2,2-tetrachloroethane	16.31	83	43876	0.68	ppb	98
59)	4-ethyltoluene	17.07	105	22241	0.67	ppb	99
60)	1,3,5-trimethylbenzene	17.13	105	28997m	0.60	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	20581	0.63	ppb	96
62)	1,3-dichlorobenzene	17.79	146	33047	0.63	ppb	99
63)	benzyl chloride	17.86	91	16304	0.69	ppb	94
64)	1,4-dichlorobenzene	17.91	146	30923	0.60	ppb	99
65)	1,2-dichlorobenzene	18.19	146	30470	0.63	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	12621	0.66	ppb	98
67)	Naphthalene	19.96	128	11232	0.76	ppb	96
68)	Hexachloro-1,3-butadiene	20.07	225	30280	0.64	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111615.D Vial: 6
Acq On : 16 Nov 2009 22:36 Operator: RJP
Sample : A1UT_0.75 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:24 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111616.D Vial: 7
Acq On : 16 Nov 2009 23:09 Operator: RJP
Sample : A1UT_0.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:03 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17066	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	41681	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	35586	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	16801	0.97	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	5268	0.53	ppb		92
3) Freon 12	3.00	85	44096	0.52	ppb		99
4) Chloromethane	3.14	50	9462	0.52	ppb		90
5) Freon 114	3.14	85	29585	0.53	ppb		98
6) Vinyl Chloride	3.28	62	8199	0.49	ppb		99
7) 1,3-butadiene	3.36	39	7168	0.51	ppb		70
8) Bromomethane	3.61	94	10290	0.51	ppb		100
9) Chloroethane	3.74	64	3333	0.49	ppb		98
10) Vinyl Bromide	3.99	106	10412	0.52	ppb		99
11) Freon 11	4.20	101	30904	0.51	ppb		98
12) Acetone	4.35	58	2962	0.51	ppb		99
13) Isopropyl alcohol	4.45	45	8028	0.58	ppb	#	40
14) 1,1-dichloroethene	4.81	96	9513	0.50	ppb		96
15) Freon 113	4.99	101	22510	0.52	ppb		99
16) Methylene chloride	5.21	84	8208	0.53	ppb		90
17) Allyl chloride	5.20	41	7484	0.54	ppb		97
18) Carbon disulfide	5.34	76	25155	0.51	ppb		100
19) trans-1,2-dichloroethene	6.06	61	13195	0.55	ppb		90
20) methyl tert-butyl ether	6.13	73	13331	0.47	ppb		88
21) 1,1-dichloroethane	6.45	63	18886	0.52	ppb		99
22) Vinyl acetate	6.48	43	7991	0.49	ppb		100
23) Methyl Ethyl Ketone	6.97	43	13002	0.46	ppb		93
24) cis-1,2-dichloroethene	7.34	61	9765	0.48	ppb		92
25) Hexane	6.98	41	6714	0.48	ppb		96
26) Ethyl acetate	7.55	43	8632	0.46	ppb		97
27) Chloroform	7.93	83	29947	0.51	ppb		99
28) Tetrahydrofuran	8.11	42	3117	0.42	ppb		94
29) 1,2-dichloroethane	9.01	62	16262	0.50	ppb		99
31) 1,1,1-trichloroethane	8.71	97	30787	0.47	ppb		99
32) Cyclohexane	9.41	56	6087	0.41	ppb	#	85
33) Carbon tetrachloride	9.35	117	40906	0.47	ppb		98
34) Benzene	9.32	78	21872	0.44	ppb		97
35) 1,4-dioxane	11.15	88	3267	0.61	ppb		98
36) 2,2,4-trimethylpentane	10.30	57	18010	0.41	ppb		96
37) Heptane	10.71	43	5497	0.41	ppb		99
38) Trichloroethene	10.81	130	16337	0.43	ppb		96
39) 1,2-dichloropropane	10.92	63	8868	0.43	ppb		98
40) Bromodichloromethane	11.31	83	30291	0.47	ppb		100
41) cis-1,3-dichloropropene	12.20	75	9721	0.41	ppb		98
42) trans-1,3-dichloropropene	13.00	75	8412	0.43	ppb		99
43) 1,1,2-trichloroethane	13.30	97	14986	0.45	ppb		99
45) Toluene	13.04	92	11744	0.42	ppb		99
46) Methyl Isobutyl Ketone	12.16	43	9234	0.73	ppb		96
47) Dibromochloromethane	13.97	129	34532	0.49	ppb		99
48) Methyl Butyl Ketone	13.53	43	8223	0.60	ppb		94
49) 1,2-dibromoethane	14.22	107	22058	0.47	ppb		98
50) Tetrachloroethylene	14.06	164	18775	0.48	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111616.D Vial: 7
Acq On : 16 Nov 2009 23:09 Operator: RJP
Sample : A1UT_0.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:03 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.00	112	24304	0.45	ppb	97
52)	Ethylbenzene	15.27	91	21158m	0.40	ppb	
53)	m&p-xylene	15.46	91	35749	0.71	ppb	99
54)	Styrene	15.86	104	11280	0.40	ppb	95
55)	Bromoform	15.95	173	35028	0.46	ppb	99
56)	o-xylene	15.89	91	25824m	0.45	ppb	
58)	1,1,2,2-tetrachloroethane	16.31	83	27665	0.44	ppb	99
59)	4-ethyltoluene	17.07	105	13614	0.42	ppb	99
60)	1,3,5-trimethylbenzene	17.14	105	15450	0.33	ppb	99
61)	1,2,4-trimethylbenzene	17.54	105	12485	0.39	ppb	95
62)	1,3-dichlorobenzene	17.79	146	19756	0.39	ppb	98
63)	benzyl chloride	17.86	91	8963	0.38	ppb	98
64)	1,4-dichlorobenzene	17.92	146	18695	0.37	ppb	97
65)	1,2-dichlorobenzene	18.19	146	17228	0.36	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	7243	0.39	ppb	95
67)	Naphthalene	19.96	128	6231	0.43	ppb	99
68)	Hexachloro-1,3-butadiene	20.06	225	17623	0.38	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

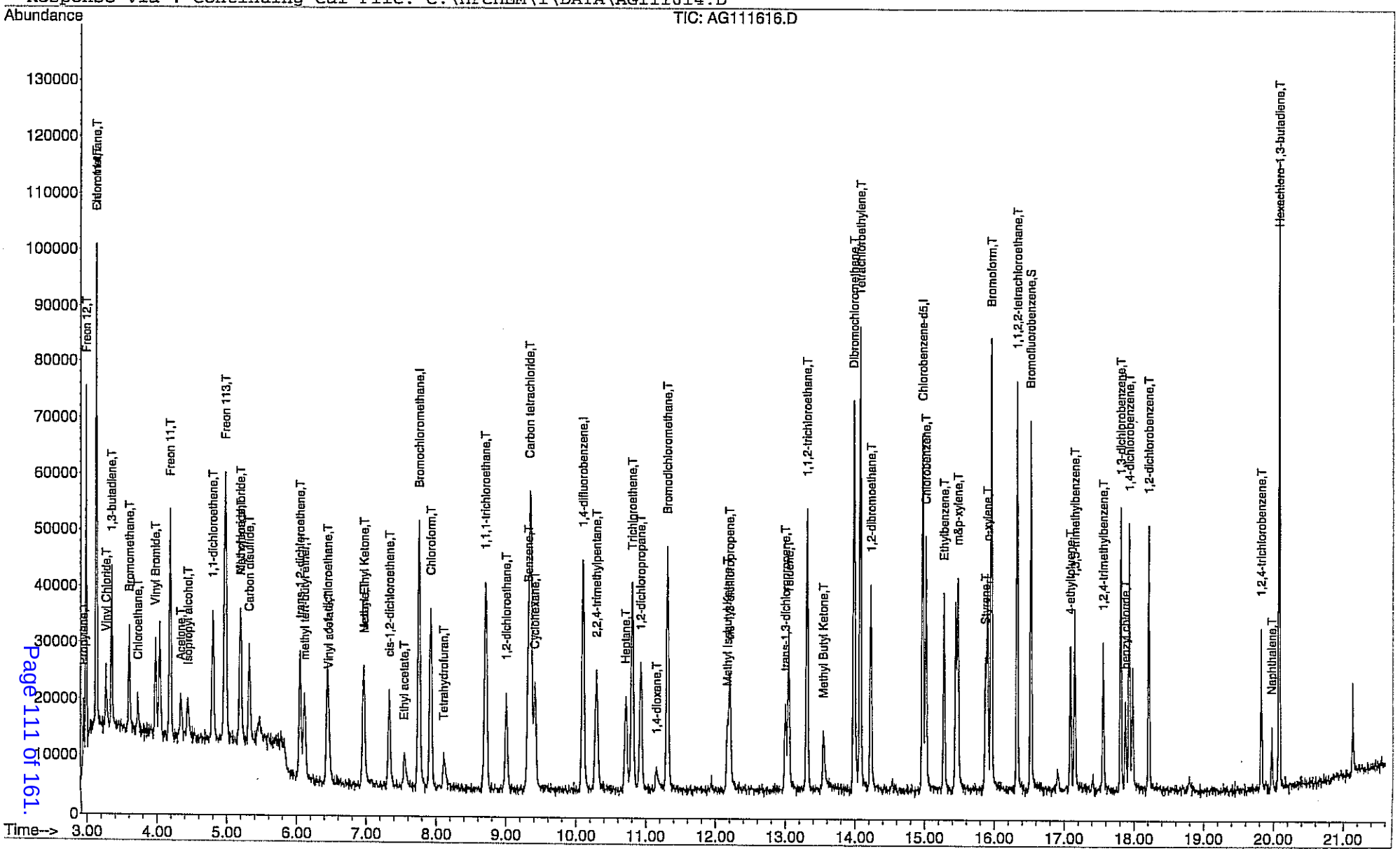
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111616.D
Acq On : 16 Nov 2009 23:09
Sample : A1UT_0.50
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:25 2009

Vial: 7
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111617.D Vial: 8
Acq On : 16 Nov 2009 23:41 Operator: RJP
Sample : A1UT_0.30 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:22 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17547	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	40504	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	35426	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	15427	0.89	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 89.00%				
Target Compounds							Qvalue
2) Propylene	2.95	41	3203	0.31	ppb		93
3) Freon 12	3.00	85	27488	0.32	ppb		98
4) Chloromethane	3.14	50	6004	0.32	ppb		87
5) Freon 114	3.14	85	18208	0.32	ppb		98
6) Vinyl Chloride	3.28	62	5194	0.30	ppb		97
7) 1,3-butadiene	3.36	39	4893	0.34	ppb		73
8) Bromomethane	3.61	94	6558	0.32	ppb		100
9) Chloroethane	3.74	64	2035	0.29	ppb		89
10) Vinyl Bromide	3.99	106	6229	0.30	ppb		98
11) Freon 11	4.20	101	18923	0.30	ppb		97
12) Acetone	4.36	58	2032	0.34	ppb	#	86
13) Isopropyl alcohol	4.45	45	5637	0.40	ppb	#	40
14) 1,1-dichloroethene	4.81	96	6250	0.32	ppb	#	86
15) Freon 113	4.99	101	13831	0.31	ppb		98
16) Methylene chloride	5.22	84	4970	0.31	ppb		93
17) Allyl chloride	5.20	41	4713	0.33	ppb		90
18) Carbon disulfide	5.33	76	15723	0.31	ppb		98
19) trans-1,2-dichloroethene	6.06	61	7360	0.30	ppb		89
20) methyl tert-butyl ether	6.13	73	9471	0.32	ppb		90
21) 1,1-dichloroethane	6.45	63	11449	0.31	ppb		98
22) Vinyl acetate	6.47	43	4837	0.29	ppb		92
23) Methyl Ethyl Ketone	6.97	43	7734	0.26	ppb		89
24) cis-1,2-dichloroethene	7.34	61	5869	0.28	ppb		94
25) Hexane	6.98	41	3836	0.26	ppb		92
26) Ethyl acetate	7.56	43	5054	0.26	ppb		93
27) Chloroform	7.93	83	18468	0.30	ppb		97
28) Tetrahydrofuran	8.11	42	2083	0.27	ppb	#	62
29) 1,2-dichloroethane	9.01	62	9813	0.30	ppb		99
31) 1,1,1-trichloroethane	8.72	97	18467	0.29	ppb		98
32) Cyclohexane	9.42	56	3346	0.23	ppb	#	75
33) Carbon tetrachloride	9.35	117	24174	0.28	ppb		94
34) Benzene	9.33	78	14014	0.29	ppb		94
35) 1,4-dioxane	11.16	88	2266	0.44	ppb		93
36) 2,2,4-trimethylpentane	10.30	57	10071	0.24	ppb		93
37) Heptane	10.71	43	3185	0.24	ppb		96
38) Trichloroethene	10.81	130	9058	0.25	ppb		98
39) 1,2-dichloropropane	10.92	63	5230	0.26	ppb		94
40) Bromodichloromethane	11.31	83	17736	0.28	ppb		95
41) cis-1,3-dichloropropene	12.20	75	6007	0.26	ppb		97
42) trans-1,3-dichloropropene	13.00	75	5184	0.27	ppb		96
43) 1,1,2-trichloroethane	13.30	97	8940	0.27	ppb		99
45) Toluene	13.04	92	7541m	0.27	ppb		
46) Methyl Isobutyl Ketone	12.17	43	5892	0.47	ppb		98
47) Dibromochloromethane	13.98	129	20780	0.29	ppb		99
48) Methyl Butyl Ketone	13.54	43	3839	0.28	ppb		92
49) 1,2-dibromoethane	14.22	107	12253	0.26	ppb		96
50) Tetrachloroethylene	14.06	164	10935	0.28	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111617.D Vial: 8
Acq On : 16 Nov 2009 23:41 Operator: RJP
Sample : A1UT_0.30 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:22 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

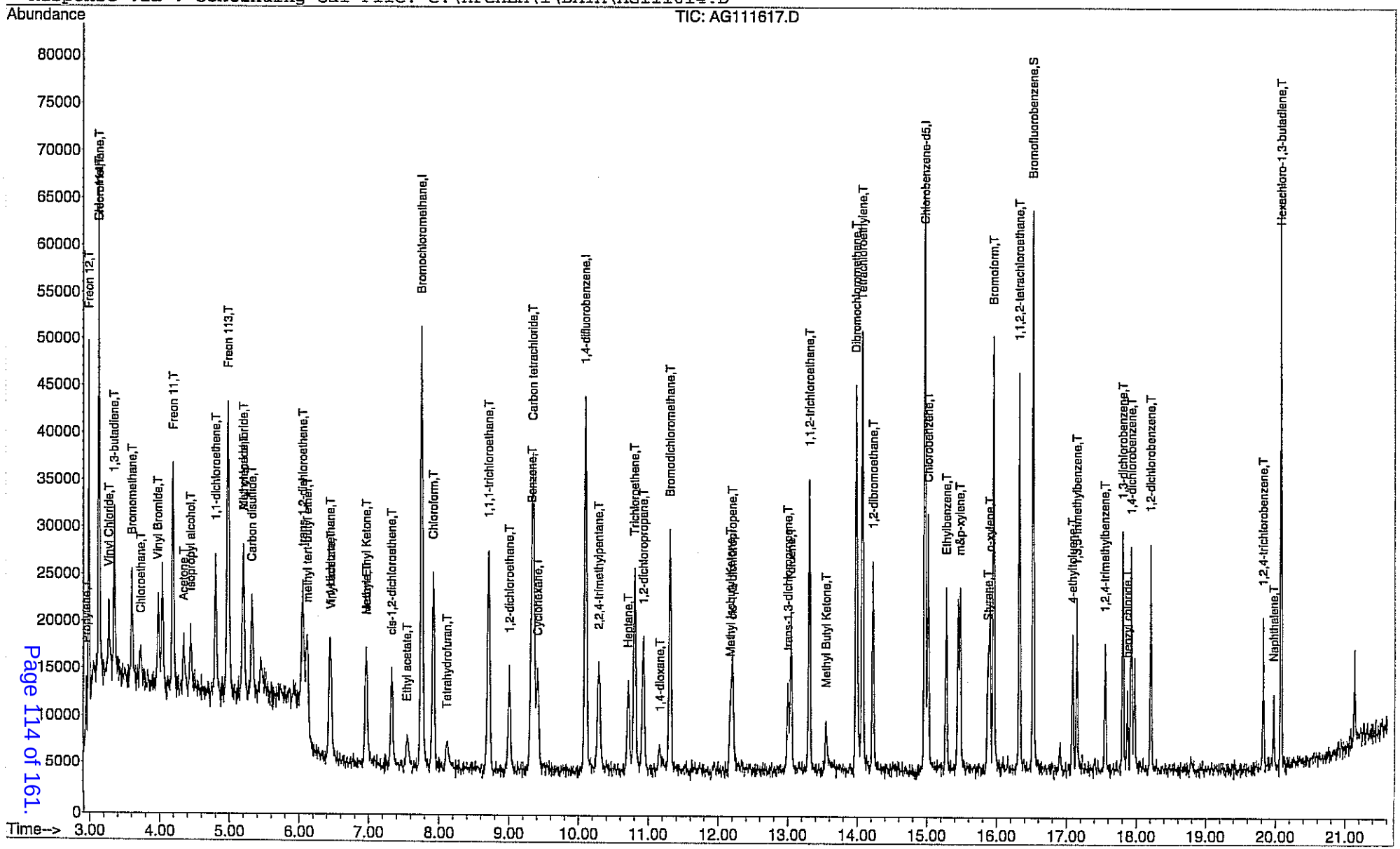
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
51)	Chlorobenzene	15.01	112	14157	0.26 ppb	96
52)	Ethylbenzene	15.27	91	11966	0.23 ppb	98
53)	m&p-xylene	15.46	91	18915	0.38 ppb	97
54)	Styrene	15.86	104	6007	0.21 ppb	97
55)	Bromoform	15.94	173	19485	0.26 ppb	98
56)	o-xylene	15.89	91	13860m	0.24 ppb	
58)	1,1,2,2-tetrachloroethane	16.31	83	15864	0.25 ppb	98
59)	4-ethyltoluene	17.07	105	7115	0.22 ppb	98
60)	1,3,5-trimethylbenzene	17.13	105	8996m	0.19 ppb	
61)	1,2,4-trimethylbenzene	17.54	105	6447	0.20 ppb	96
62)	1,3-dichlorobenzene	17.79	146	10206	0.20 ppb	97
63)	benzyl chloride	17.86	91	4662	0.20 ppb	99
64)	1,4-dichlorobenzene	17.91	146	9431m	0.19 ppb	
65)	1,2-dichlorobenzene	18.19	146	9572m	0.20 ppb	
66)	1,2,4-trichlorobenzene	19.81	180	3965	0.21 ppb	95
67)	Naphthalene	19.96	128	4125	0.29 ppb	92
68)	Hexachloro-1,3-butadiene	20.06	225	9732	0.21 ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111617.D Vial: 8
Acq On : 16 Nov 2009 23:41 Operator: RJP
Sample : A1UT_0.30 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:37 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111618.D Vial: 9
Acq On : 17 Nov 2009 00:13 Operator: RJP
Sample : A1UT_0.15 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:51 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.77	128	16510	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	38385	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	34106	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	14142	0.85	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 85.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	1877	0.19	ppb		100
3) Freon 12	3.00	85	16015	0.20	ppb		97
4) Chloromethane	3.14	50	3408	0.20	ppb		86
5) Freon 114	3.14	85	10342	0.19	ppb		98
6) Vinyl Chloride	3.29	62	3004	0.18	ppb		96
7) 1,3-butadiene	3.36	39	2534m	0.19	ppb		
8) Bromomethane	3.61	94	3853	0.20	ppb		97
9) Chloroethane	3.74	64	1299	0.20	ppb		83
10) Vinyl Bromide	3.99	106	3603	0.18	ppb		95
11) Freon 11	4.20	101	10532	0.18	ppb		94
13) Isopropyl alcohol	4.45	45	3488m	0.26	ppb		
14) 1,1-dichloroethene	4.82	96	3601	0.19	ppb	#	85
15) Freon 113	4.99	101	7647	0.18	ppb		96
16) Methylene chloride	5.22	84	2926	0.19	ppb		92
17) Allyl chloride	5.21	41	2732	0.20	ppb		90
18) Carbon disulfide	5.34	76	8999	0.19	ppb		94
19) trans-1,2-dichloroethene	6.06	61	4261	0.18	ppb		96
20) methyl tert-butyl ether	6.13	73	4461	0.16	ppb		82
21) 1,1-dichloroethane	6.45	63	6549	0.19	ppb		97
22) Vinyl acetate	6.47	43	2539	0.16	ppb		87
23) Methyl Ethyl Ketone	6.97	43	3725	0.14	ppb		87
24) cis-1,2-dichloroethene	7.34	61	3390	0.17	ppb		99
25) Hexane	6.97	41	2244	0.16	ppb	#	81
26) Ethyl acetate	7.56	43	2861	0.16	ppb		96
27) Chloroform	7.93	83	10355	0.18	ppb		99
28) Tetrahydrofuran	8.11	42	790	0.11	ppb	#	29
29) 1,2-dichloroethane	9.01	62	5655	0.18	ppb		99
31) 1,1,1-trichloroethane	8.71	97	10544	0.17	ppb		99
32) Cyclohexane	9.42	56	1476	0.11	ppb	#	57
33) Carbon tetrachloride	9.35	117	14175	0.18	ppb		100
34) Benzene	9.33	78	7258	0.16	ppb		95
36) 2,2,4-trimethylpentane	10.28	57	5860	0.15	ppb		98
37) Heptane	10.72	43	1945	0.16	ppb		93
38) Trichloroethene	10.80	130	5236	0.15	ppb		98
39) 1,2-dichloropropane	10.92	63	2837	0.15	ppb		95
40) Bromodichloromethane	11.31	83	9885	0.16	ppb		98
41) cis-1,3-dichloropropene	12.20	75	3130	0.14	ppb		99
42) trans-1,3-dichloropropene	13.00	75	2761	0.15	ppb		98
43) 1,1,2-trichloroethane	13.31	97	5215	0.17	ppb		99
45) Toluene	13.04	92	3620	0.13	ppb		93
47) Dibromochloromethane	13.98	129	11513	0.17	ppb		98
49) 1,2-dibromoethane	14.22	107	7013	0.15	ppb		99
50) Tetrachloroethylene	14.07	164	6261	0.17	ppb		93
51) Chlorobenzene	15.00	112	7847	0.15	ppb		94
52) Ethylbenzene	15.27	91	6490	0.13	ppb		98
53) m&p-xylene	15.47	91	10300	0.21	ppb		98
54) Styrene	15.86	104	3238	0.12	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111618.D Vial: 9
Acq On : 17 Nov 2009 00:13 Operator: RJP
Sample : A1UT_0.15 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:51 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	Bromoform	15.94	173	10840	0.15	ppb	99
56)	o-xylene	15.90	91	7407m	0.13	ppb	
58)	1,1,2,2-tetrachloroethane	16.31	83	8877	0.15	ppb	97
59)	4-ethyltoluene	17.07	105	3829	0.12	ppb	96
60)	1,3,5-trimethylbenzene	17.13	105	4582m	0.10	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	3928m	0.13	ppb	
62)	1,3-dichlorobenzene	17.79	146	5501	0.11	ppb	96
63)	benzyl chloride	17.86	91	3426m	0.15	ppb	
65)	1,2-dichlorobenzene	18.19	146	5275m	0.12	ppb	
66)	1,2,4-trichlorobenzene	19.81	180	2102m	0.12	ppb	
67)	Naphthalene	19.96	128	2808	0.20	ppb	98
68)	Hexachloro-1,3-butadiene	20.06	225	5278	0.12	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

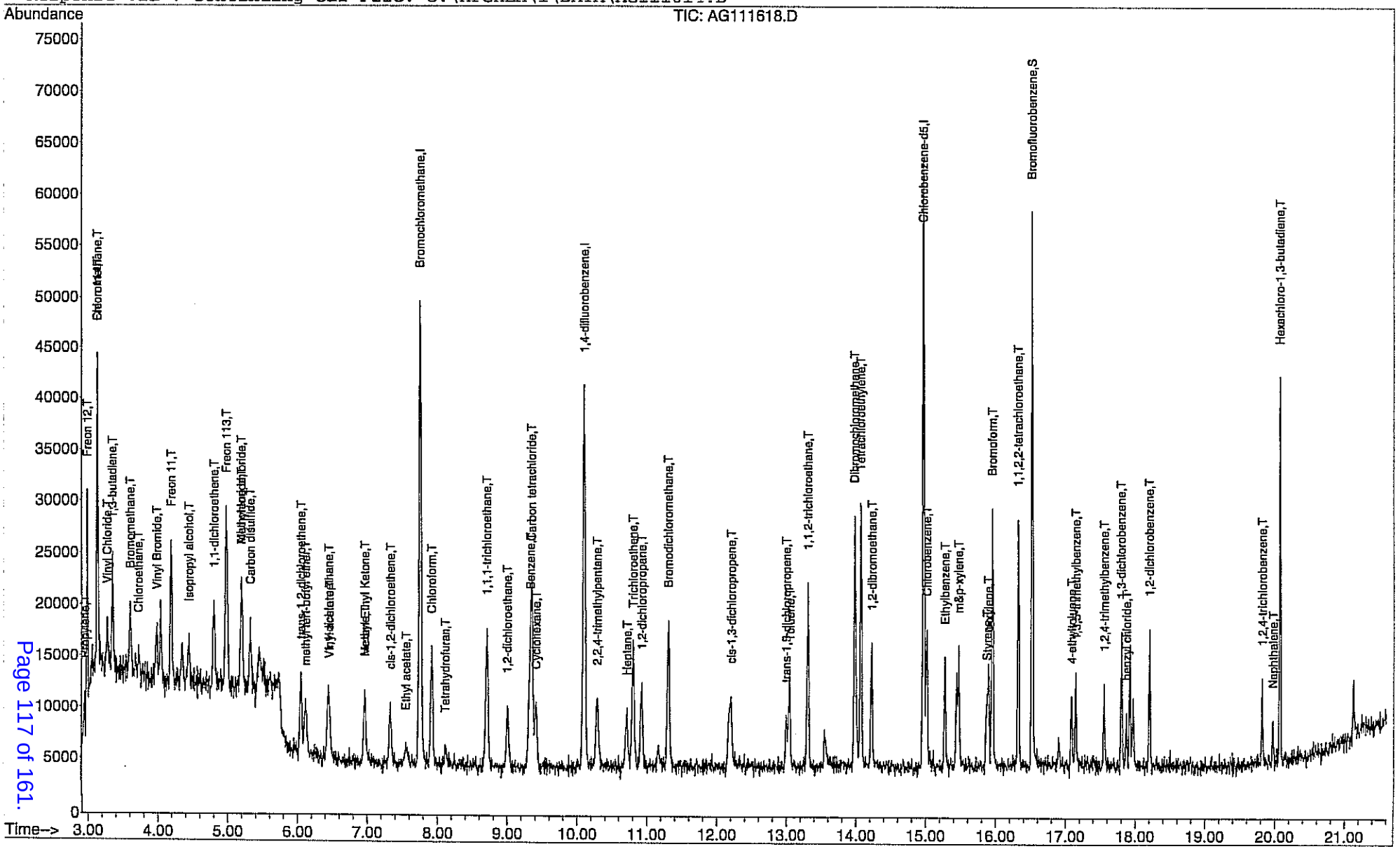
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111618.D
Acq On : 17 Nov 2009 00:13
Sample : A1UT_0.15
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:28 2009

Vial: 9
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111619.D Vial: 10
Acq On : 17 Nov 2009 00:46 Operator: RJP
Sample : A1UT_0.10 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:18:12 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.76	128	16692	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	37239	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	31393	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	12427	0.81	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 81.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	3.29	62	2104	0.13	ppb	99
33) Carbon tetrachloride	9.36	117	9401	0.12	ppb	98
38) Trichloroethene	10.80	130	3311	0.10	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

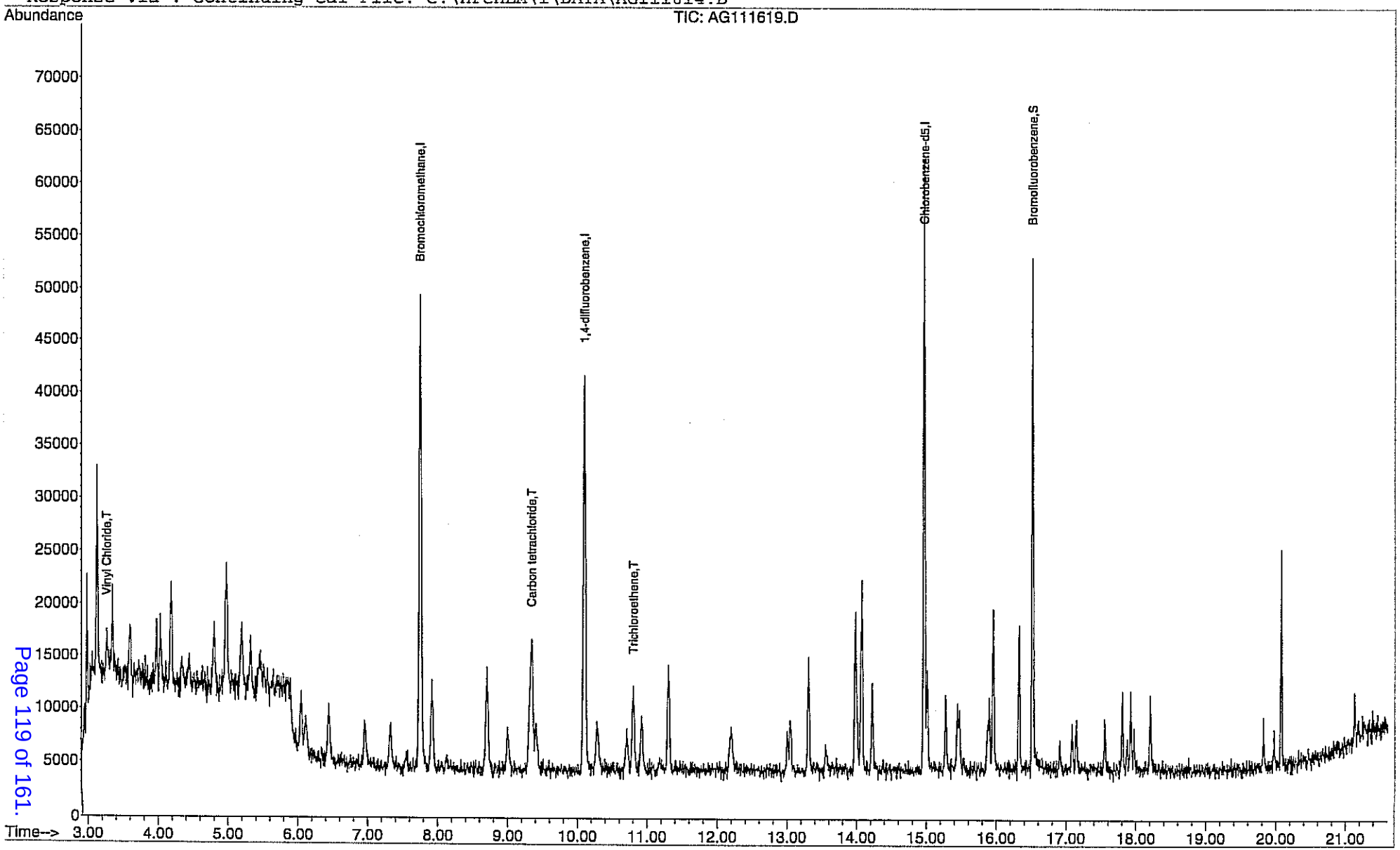
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111619.D
Acq On : 17 Nov 2009 00:46
Sample : A1UT_0.10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:29 2009

Vial: 10
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111621.D Vial: 12
Acq On : 17 Nov 2009 1:50 Operator: RJP
Sample : A1UT_0.04 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:18:47 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.76	128	16363	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	36985	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	31904	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	12098	0.78	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 78.00%			
Target Compounds						Qvalue
33) Carbon tetrachloride	9.35	117	5592	0.07	ppb	95
38) Trichloroethene	10.80	130	1885	0.06	ppb	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

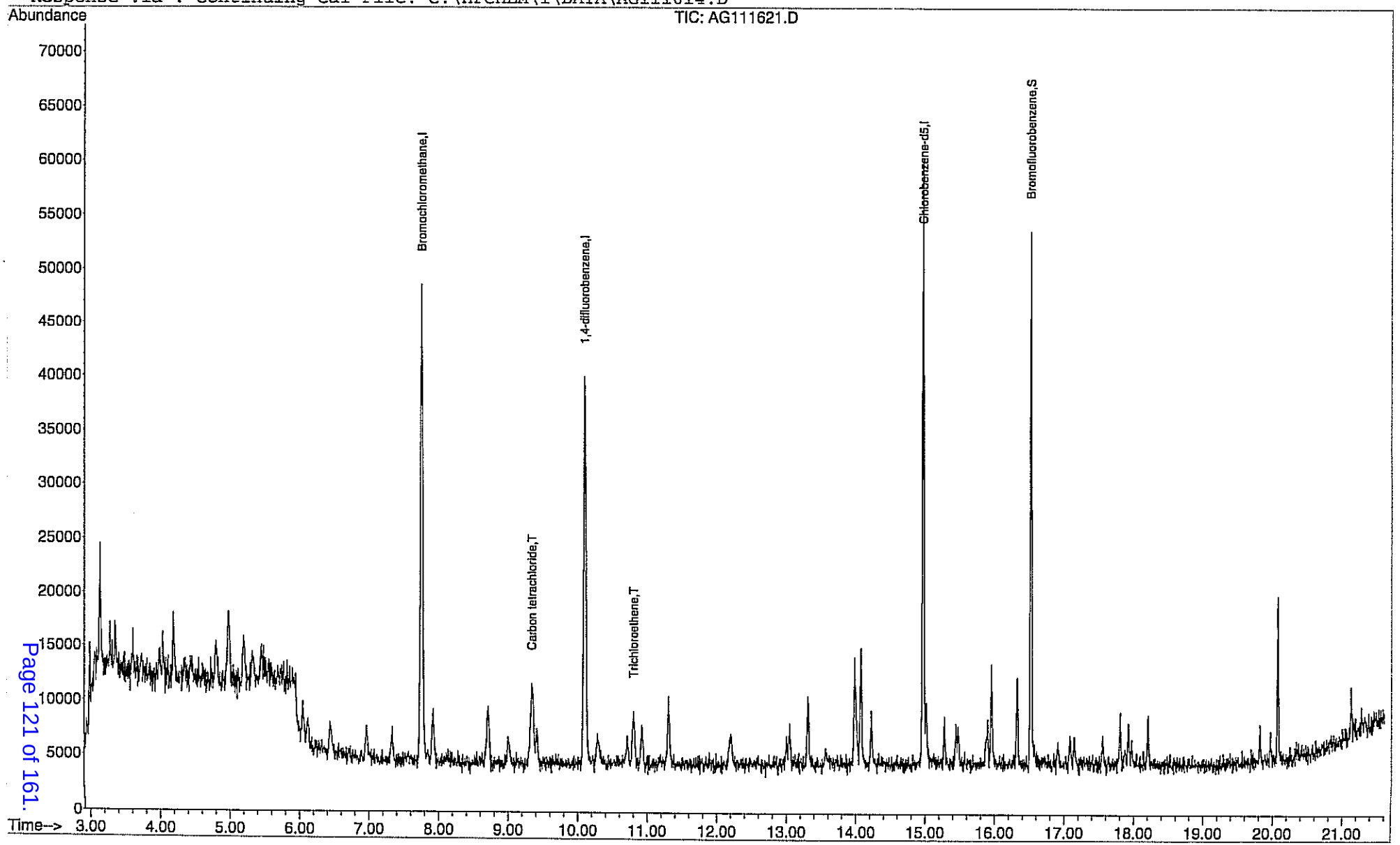
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111621.D
Acq On : 17 Nov 2009 1:50
Sample : A1UT_0.04
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:30 2009

Vial: 12
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CALIBRATION VERIFICATION

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AG120404.D Vial: 4
Acq On : 4 Dec 2009 11:55 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:06 2009
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	110	0.00
2	T	Propylene	0.613	0.521	15.0	97	0.00
3	T	Freon 12	5.150	5.040	2.1	111	0.00
4	T	Chloromethane	1.120	1.000	10.7	104	0.00
5	T	Freon 114	3.394	3.000	11.6	100	0.00
6	T	Vinyl Chloride	1.060	0.865	18.4	96	0.00
7	T	1,3-butadiene	0.847	0.754	11.0	100	0.00
8	T	Bromomethane	1.212	1.041	14.1	97	0.00
9	T	Chloroethane	0.393	0.322	18.1	88	0.00
10	T	Vinyl Bromide	1.202	1.051	12.6	97	0.00
11	T	Freon 11	3.580	3.216	10.2	99	0.00
12	T	Acetone	0.346	0.325	6.1	105	0.00
13	T	Isopropyl alcohol	0.943	0.813	13.8	111	0.00
14	T	1,1-dichloroethene	1.141	0.967	15.2	94	0.00
15	T	Freon 113	2.577	2.263	12.2	98	0.00
16	T	Methylene chloride	0.991	0.838	15.4	101	0.00
17	T	Allyl chloride	0.872	0.744	14.7	101	0.00
18	T	Carbon disulfide	3.157	2.539	19.6	96	0.00
19	T	trans-1,2-dichloroethene	1.456	1.524	-4.7	120	0.00
20	T	methyl tert-butyl ether	1.710	1.660	2.9	109	0.00
21	T	1,1-dichloroethane	2.201	2.075	5.7	107	0.00
22	T	Vinyl acetate	0.962	0.778	19.1	90	0.00
23	T	Methyl Ethyl Ketone	1.630	1.415	13.2	93	0.00
24	T	cis-1,2-dichloroethene	1.182	1.018	13.9	94	0.00
25	T	Hexane	0.832	0.738	11.3	98	0.00
26	T	Ethyl acetate	1.109	0.942	15.1	94	0.00
27	T	Chloroform	3.504	3.345	4.5	106	0.00
28	T	Tetrahydrofuran	0.422	0.335	20.6	84	0.00
29	T	1,2-dichloroethane	1.908	1.726	9.5	100	0.00
30	I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00
31	T	1,1,1-trichloroethane	1.555	1.635	-5.1	105	0.00
32	T	Cyclohexane	0.333	0.322	3.3	92	0.00
33	T	Carbon tetrachloride	2.281	2.319	-1.7	112	0.00
34	T	Benzene	1.194	1.127	5.6	96	0.00
35	T	1,4-dioxane	0.158	0.119	24.7	94	0.00
36	T	2,2,4-trimethylpentane	0.996	0.876	12.0	85	0.00
37	T	Heptane	0.313	0.268	14.4	84	0.00
38	T	Trichloroethene	0.898	0.872	2.9	98	0.00
39	T	1,2-dichloropropane	0.465	0.462	0.6	95	0.00
40	T	Bromodichloromethane	1.529	1.570	-2.7	102	0.00
41	T	cis-1,3-dichloropropene	0.571	0.539	5.6	95	0.00
42	T	trans-1,3-dichloropropene	0.459	0.417	9.2	91	0.00
43	T	1,1,2-trichloroethane	0.782	0.818	-4.6	103	0.00
44	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
45	T	Toluene	0.767	0.699	8.9	95	0.00
46	T	Methyl Isobutyl Ketone	0.439	0.350	20.3	105	0.00
47	T	Dibromochloromethane	1.979	1.864	5.8	99	0.00
48	T	Methyl Butyl Ketone	0.402	0.426	-6.0	117	0.00
49	T	1,2-dibromoethane	1.268	1.253	1.2	101	0.00
50	T	Tetrachloroethylene	1.083	1.049	3.1	101	0.00
51	T	Chlorobenzene	1.438	1.349	6.2	95	0.00
52	T	Ethylbenzene	1.398	1.221	12.7	88	0.00
53	T	m&p-xylene	1.292	1.177	8.9	89	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AG120404.D Vial: 4
Acq On : 4 Dec 2009 11:55 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:06 2009
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Styrene	0.748	0.674	9.9	91	0.00
55	T	Bromoform	2.031	1.954	3.8	97	0.00
56	T	o-xylene	1.604	1.331	17.0	88	0.00
57	S	Bromofluorobenzene	0.461	0.480	-4.1	105	0.00
58	T	1,1,2,2-tetrachloroethane	1.661	1.744	-5.0	105	0.00
59	T	4-ethyltoluene	0.899	0.739	17.8	87	0.00
60	T	1,3,5-trimethylbenzene	1.186	1.082	8.8	87	0.00
61	T	1,2,4-trimethylbenzene	0.863	0.785	9.0	93	0.00
62	T	1,3-dichlorobenzene	1.314	1.301	1.0	96	0.00
63	T	benzyl chloride	0.634	0.530	16.4	86	0.00
64	T	1,4-dichlorobenzene	1.283	1.272	0.9	95	0.00
65	T	1,2-dichlorobenzene	1.221	1.192	2.4	95	0.00
66	T	1,2,4-trichlorobenzene	0.483	0.474	1.9	96	0.00
67	T	Naphthalene	0.433	0.303	30.0#	79	0.00
68	T	Hexachloro-1,3-butadiene	1.149	1.287	-12.0	106	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120404.D Vial: 4
Acq On : 4 Dec 2009 11:55 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 12:16:59 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	19192	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	40876	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	38624	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	18532	1.04	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 104.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	9992	0.85	ppb		99
3) Freon 12	3.00	85	96723	0.98	ppb		99
4) Chloromethane	3.14	50	19193	0.89	ppb		95
5) Freon 114	3.15	85	57578	0.88	ppb		99
6) Vinyl Chloride	3.28	62	16602	0.82	ppb		98
7) 1,3-butadiene	3.36	39	14462	0.89	ppb		98
8) Bromomethane	3.61	94	19982	0.86	ppb		99
9) Chloroethane	3.74	64	6178	0.82	ppb		92
10) Vinyl Bromide	3.99	106	20168	0.87	ppb		96
11) Freon 11	4.20	101	61721	0.90	ppb		98
12) Acetone	4.35	58	6243	0.94	ppb	#	86
13) Isopropyl alcohol	4.45	45	15599	0.86	ppb	#	100
14) 1,1-dichloroethene	4.82	96	18555	0.85	ppb		99
15) Freon 113	4.99	101	43433	0.88	ppb		98
16) Methylene chloride	5.22	84	16082	0.85	ppb		97
17) Allyl chloride	5.20	41	14283	0.85	ppb		95
18) Carbon disulfide	5.34	76	48738	0.80	ppb		99
19) trans-1,2-dichloroethene	6.06	61	29253	1.05	ppb		98
20) methyl tert-butyl ether	6.12	73	31862	0.97	ppb		98
21) 1,1-dichloroethane	6.45	63	39822	0.94	ppb		98
22) Vinyl acetate	6.48	43	14927	0.81	ppb		97
23) Methyl Ethyl Ketone	6.96	43	27158	0.87	ppb		99
24) cis-1,2-dichloroethene	7.34	61	19545	0.86	ppb		98
25) Hexane	6.98	41	14168	0.89	ppb		94
26) Ethyl acetate	7.55	43	18071	0.85	ppb		98
27) Chloroform	7.94	83	64206	0.95	ppb		100
28) Tetrahydrofuran	8.12	42	6421	0.79	ppb		91
29) 1,2-dichloroethane	9.02	62	33133	0.90	ppb		98
31) 1,1,1-trichloroethane	8.72	97	66819	1.05	ppb		100
32) Cyclohexane	9.42	56	13160	0.97	ppb		93
33) Carbon tetrachloride	9.36	117	94780	1.02	ppb		99
34) Benzene	9.33	78	46050	0.94	ppb		93
35) 1,4-dioxane	11.14	88	4848	0.75	ppb		87
36) 2,2,4-trimethylpentane	10.30	57	35790	0.88	ppb		96
37) Heptane	10.72	43	10974	0.86	ppb		98
38) Trichloroethene	10.81	130	35662	0.97	ppb		98
39) 1,2-dichloropropane	10.93	63	18875	0.99	ppb		100
40) Bromodichloromethane	11.31	83	64158	1.03	ppb		99
41) cis-1,3-dichloropropene	12.20	75	22020	0.94	ppb		100
42) trans-1,3-dichloropropene	13.00	75	17062	0.91	ppb		89
43) 1,1,2-trichloroethane	13.30	97	33428	1.05	ppb		99
45) Toluene	13.05	92	27007	0.91	ppb		96
46) Methyl Isobutyl Ketone	12.17	43	13534m	0.80	ppb		
47) Dibromochloromethane	13.98	129	71980	0.94	ppb		100
48) Methyl Butyl Ketone	13.53	43	16469	1.06	ppb		92
49) 1,2-dibromoethane	14.22	107	48404	0.99	ppb		98
50) Tetrachloroethylene	14.07	164	40519	0.97	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120404.D Vial: 4
Acq On : 4 Dec 2009 11:55 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 12:16:59 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

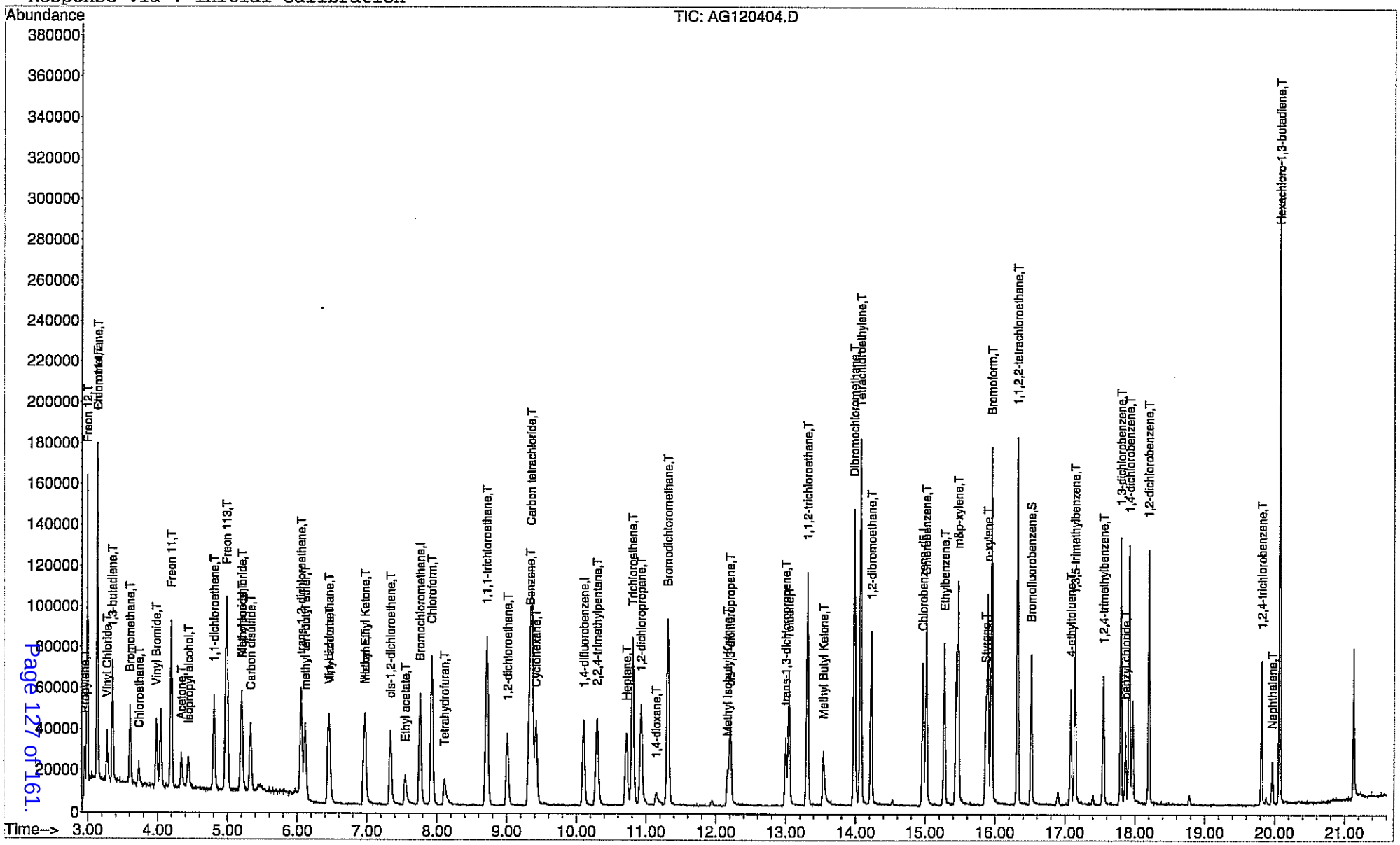
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	52091	0.94	ppb	100
52)	Ethylbenzene	15.27	91	47141	0.87	ppb	96
53)	m&p-xylene	15.47	91	90887	1.82	ppb	99
54)	Styrene	15.86	104	26016	0.90	ppb	97
55)	Bromoform	15.95	173	75457	0.96	ppb	100
56)	o-xylene	15.89	91	51398	0.83	ppb	99
58)	1,1,2,2-tetrachloroethane	16.32	83	67358	1.05	ppb	98
59)	4-ethyltoluene	17.08	105	28562	0.82	ppb	98
60)	1,3,5-trimethylbenzene	17.13	105	41786	0.91	ppb	100
61)	1,2,4-trimethylbenzene	17.54	105	30309	0.91	ppb	99
62)	1,3-dichlorobenzene	17.79	146	50256	0.99	ppb	100
63)	benzyl chloride	17.86	91	20482	0.84	ppb	99
64)	1,4-dichlorobenzene	17.92	146	49140	0.99	ppb	98
65)	1,2-dichlorobenzene	18.19	146	46056	0.98	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	18307	0.98	ppb	99
67)	Naphthalene	19.96	128	11693	0.70	ppb	99
68)	Hexachloro-1,3-butadiene	20.07	225	49719	1.12	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120404.D Vial: 4
Acq On : 4 Dec 2009 11:55 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 11:59 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:06 2009
Response via : Initial Calibration

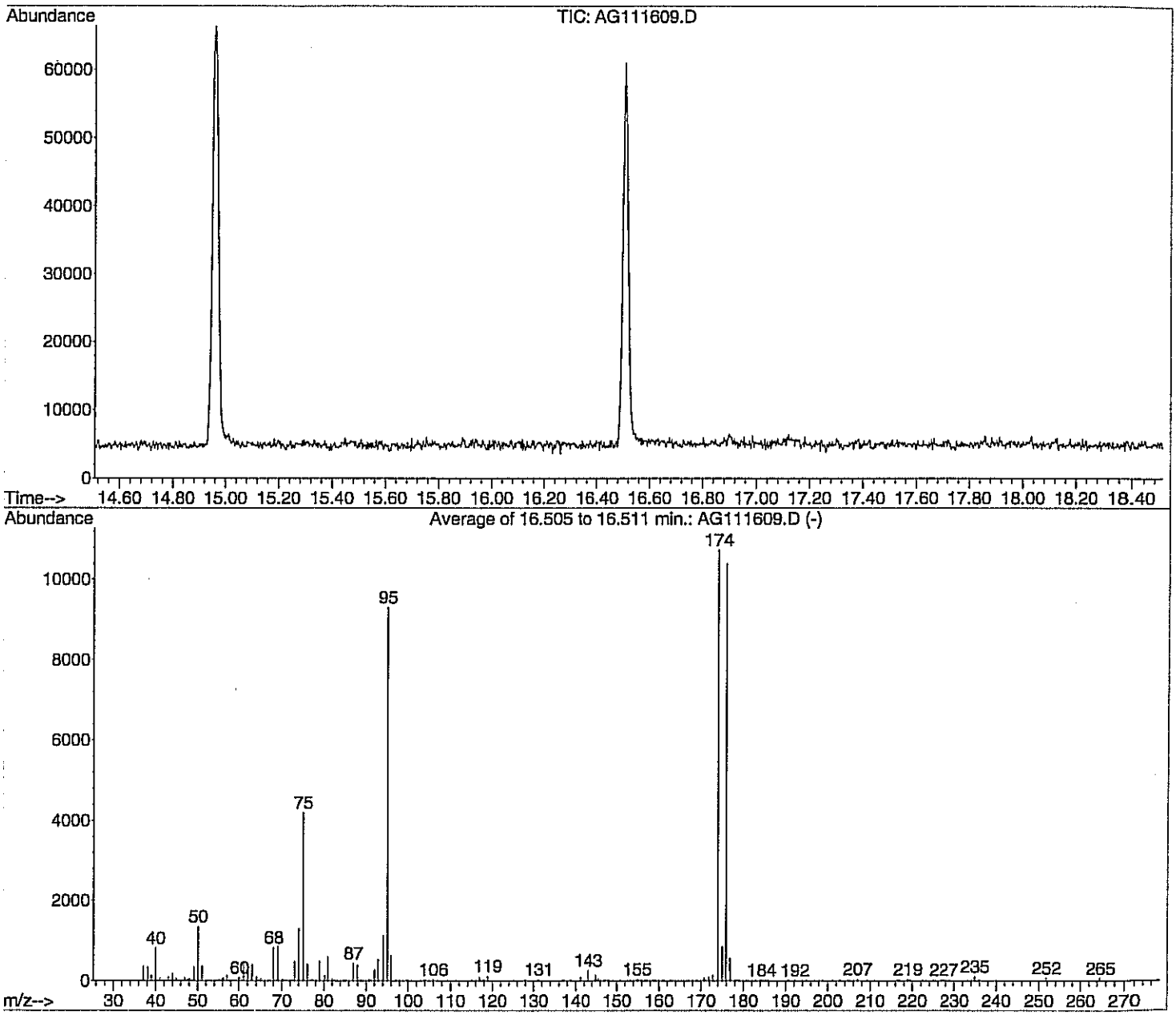


GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW DATA

Data File : C:\HPCHEM\1\DATA\AG111609.D Vial: 8
Acq On : 16 Nov 2009 19:13 Operator: RJP
Sample : BFB1UT Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration

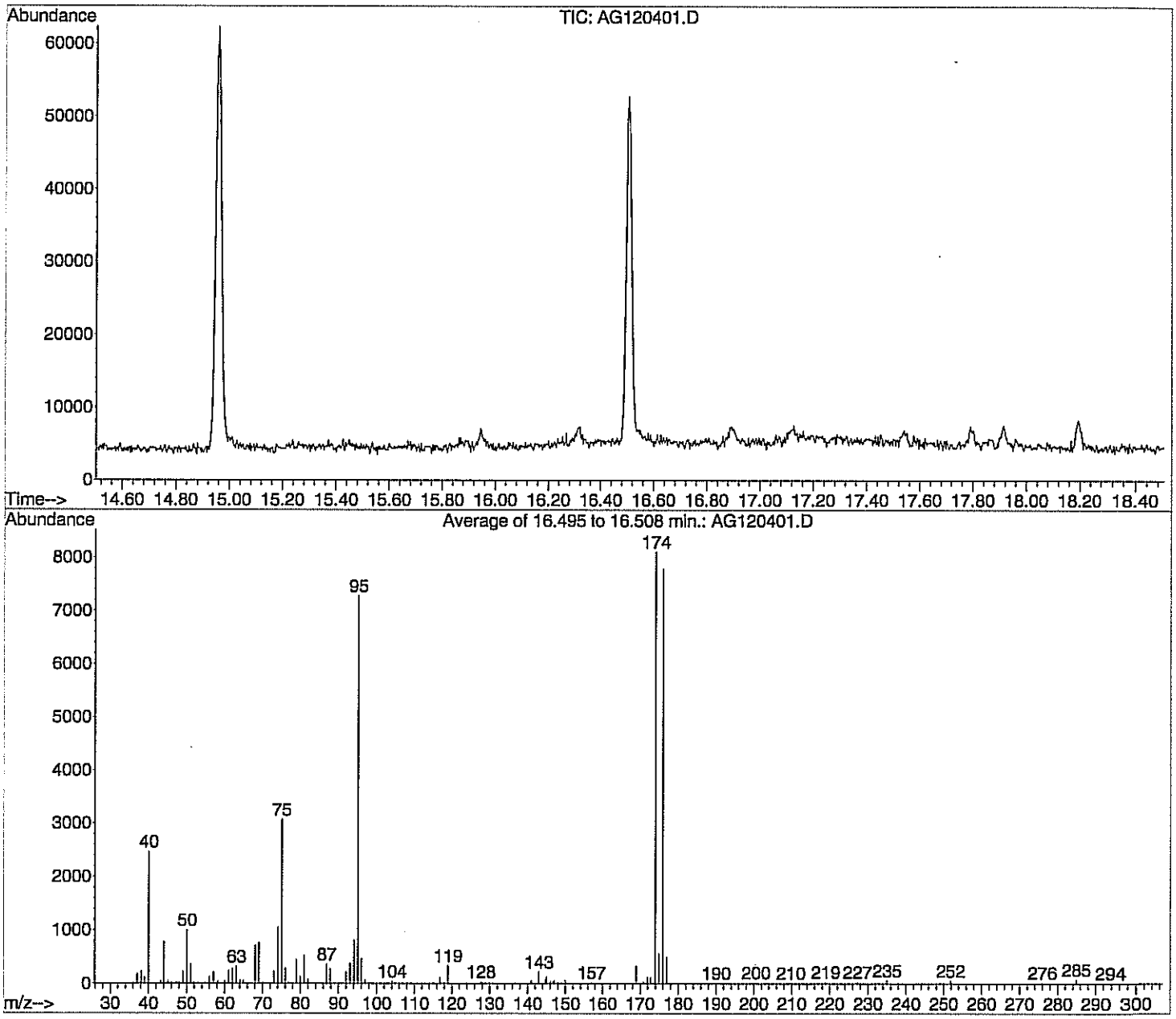


Spectrum Information: Average of 16.505 to 16.511 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.5	1352	PASS
75	95	30	66	45.1	4199	PASS
95	95	100	100	100.0	9304	PASS
96	95	5	9	6.8	630	PASS
173	174	0.00	2	1.4	146	PASS
174	95	50	120	115.4	10740	PASS
175	174	4	9	8.0	854	PASS
176	174	95	101	96.7	10390	PASS
177	176	5	9	5.4	563	PASS

Data File : C:\HPCHEM\1\DATA\AG120401.D
Acq On : 4 Dec 2009 9:02
Sample : BFB1UT
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration

Vial: 1
Operator: RJP
Inst : MSD #1
Multiplr: 1.00



Spectrum Information: Average of 16.495 to 16.508 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	13.8	1002	PASS
75	95	30	66	42.2	3070	PASS
95	95	100	100	100.0	7277	PASS
96	95	5	9	6.4	464	PASS
173	174	0.00	2	1.4	112	PASS
174	95	50	120	111.5	8111	PASS
175	174	4	9	6.9	563	PASS
176	174	95	101	96.0	7789	PASS
177	176	5	9	6.4	502	PASS

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW QC DATA

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UT-120409** SampType: **LCS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.160	0.15	1	0	116	70	130				
1,1,2,2-Tetrachloroethane	1.170	0.15	1	0	117	70	130				
1,1,2-Trichloroethane	1.170	0.15	1	0	117	70	130				
1,1-Dichloroethane	0.9700	0.15	1	0	97.0	70	130				
1,1-Dichloroethene	0.8900	0.15	1	0	89.0	70	130				
1,2,4-Trichlorobenzene	1.140	0.15	1	0	114	70	130				
1,2,4-Trimethylbenzene	1.060	0.15	1	0	106	70	130				
1,2-Dibromoethane	1.090	0.15	1	0	109	70	130				
1,2-Dichlorobenzene	1.150	0.15	1	0	115	70	130				
1,2-Dichloroethane	0.9700	0.15	1	0	97.0	70	130				
1,2-Dichloropropane	1.080	0.15	1	0	108	70	130				
1,3,5-Trimethylbenzene	1.090	0.15	1	0	109	70	130				
1,3-butadiene	1.000	0.15	1	0	100	70	130				
1,3-Dichlorobenzene	1.140	0.15	1	0	114	70	130				
1,4-Dichlorobenzene	1.160	0.15	1	0	116	70	130				
1,4-Dioxane	1.150	0.30	1	0	115	70	130				
2,2,4-trimethylpentane	1.000	0.15	1	0	100	70	130				
4-ethyltoluene	0.9500	0.15	1	0	95.0	70	130				
Acetone	0.9500	0.30	1	0	95.0	70	130				
Allyl chloride	0.8800	0.15	1	0	88.0	70	130				
Benzene	1.110	0.15	1	0	111	70	130				
Benzyl chloride	1.000	0.15	1	0	100	70	130				
Bromodichloromethane	1.150	0.15	1	0	115	70	130				
Bromoform	1.080	0.15	1	0	108	70	130				
Bromomethane	0.9000	0.15	1	0	90.0	70	130				
Carbon disulfide	1.240	0.15	1	0	124	70	130				
Carbon tetrachloride	1.110	0.15	1	0	111	70	130				
Chlorobenzene	1.040	0.15	1	0	104	70	130				
Chloroethane	0.8800	0.15	1	0	88.0	70	130				

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Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UT-120409** SampType: **LCS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	1.030	0.15	1	0	103	70	130				
Chloromethane	0.9100	0.15	1	0	91.0	70	130				
cis-1,2-Dichloroethene	0.8900	0.15	1	0	89.0	70	130				
cis-1,3-Dichloropropene	1.110	0.15	1	0	111	70	130				
Cyclohexane	1.070	0.15	1	0	107	70	130				
Dibromochloromethane	1.050	0.15	1	0	105	70	130				
Ethyl acetate	0.9600	0.25	1	0	96.0	70	130				
Ethylbenzene	0.9800	0.15	1	0	98.0	70	130				
Freon 11	0.9500	0.15	1	0	95.0	70	130				
Freon 113	0.9200	0.15	1	0	92.0	70	130				
Freon 114	0.9200	0.15	1	0	92.0	70	130				
Freon 12	1.030	0.15	1	0	103	70	130				
Heptane	0.9500	0.15	1	0	95.0	70	130				
Hexachloro-1,3-butadiene	1.340	0.15	1	0	134	70	130				S
Hexane	0.9100	0.15	1	0	91.0	70	130				
Isopropyl alcohol	0.9400	0.15	1	0	94.0	70	130				
m&p-Xylene	2.150	0.30	2	0	108	70	130				
Methyl Butyl Ketone	0.9500	0.30	1	0	95.0	70	130				
Methyl Ethyl Ketone	0.9500	0.30	1	0	95.0	70	130				
Methyl Isobutyl Ketone	1.010	0.30	1	0	101	70	130				
Methyl tert-butyl ether	0.9000	0.15	1	0	90.0	70	130				
Methylene chloride	0.8500	0.15	1	0	85.0	70	130				
o-Xylene	0.9900	0.15	1	0	99.0	70	130				
Propylene	0.9200	0.15	1	0	92.0	70	130				
Styrene	1.010	0.15	1	0	101	70	130				
Tetrachloroethylene	1.090	0.15	1	0	109	70	130				
Tetrahydrofuran	0.9000	0.15	1	0	90.0	70	130				
Toluene	1.020	0.15	1	0	102	70	130				
trans-1,2-Dichloroethene	0.8600	0.15	1	0	86.0	70	130				
trans-1,3-Dichloropropene	1.020	0.15	1	0	102	70	130				
Trichloroethene	1.060	0.15	1	0	106	70	130				

Qualifiers:
. Results reported are not blank corrected
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected at or below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UT-120409** SampType: **LCS** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38485**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	0.7700	0.15	1	0	77.0	70	130				
Vinyl Bromide	0.9100	0.15	1	0	91.0	70	130				
Vinyl chloride	0.8300	0.15	1	0	83.0	70	130				

Sample ID: **LCS1UTD-120409** SampType: **LCSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.280	0.15	1	0	128	70	130	1.16	9.84	30	
1,1,2,2-Tetrachloroethane	1.240	0.15	1	0	124	70	130	1.17	5.81	30	
1,1,2-Trichloroethane	1.250	0.15	1	0	125	70	130	1.17	6.61	30	
1,1-Dichloroethane	0.9800	0.15	1	0	98.0	70	130	0.97	1.03	30	
1,1-Dichloroethene	0.9300	0.15	1	0	93.0	70	130	0.89	4.40	30	
1,2,4-Trichlorobenzene	1.530	0.15	1	0	153	70	130	1.14	29.2	30	S
1,2,4-Trimethylbenzene	1.250	0.15	1	0	125	70	130	1.06	16.5	30	
1,2-Dibromoethane	1.260	0.15	1	0	126	70	130	1.09	14.5	30	
1,2-Dichlorobenzene	1.380	0.15	1	0	138	70	130	1.15	18.2	30	S
1,2-Dichloroethane	0.9900	0.15	1	0	99.0	70	130	0.97	2.04	30	
1,2-Dichloropropane	1.230	0.15	1	0	123	70	130	1.08	13.0	30	
1,3,5-Trimethylbenzene	1.270	0.15	1	0	127	70	130	1.09	15.3	30	
1,3-butadiene	0.9700	0.15	1	0	97.0	70	130	1	3.05	30	
1,3-Dichlorobenzene	1.320	0.15	1	0	132	70	130	1.14	14.6	30	S
1,4-Dichlorobenzene	1.380	0.15	1	0	138	70	130	1.16	17.3	30	S
1,4-Dioxane	1.090	0.30	1	0	109	70	130	1.15	5.36	30	
2,2,4-trimethylpentane	1.120	0.15	1	0	112	70	130	1	11.3	30	
4-ethyltoluene	1.080	0.15	1	0	108	70	130	0.95	12.8	30	
Acetone	1.080	0.30	1	0	108	70	130	0.95	12.8	30	
Allyl chloride	0.7200	0.15	1	0	72.0	70	130	0.88	20.0	30	
Benzene	1.120	0.15	1	0	112	70	130	1.11	0.897	30	
Benzyl chloride	1.180	0.15	1	0	118	70	130	1	16.5	30	

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

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CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UTD-120409** SampType: **LCSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	1.170	0.15	1	0	117	70	130	1.15	1.72	30	
Bromoform	1.270	0.15	1	0	127	70	130	1.08	16.2	30	
Bromomethane	0.9500	0.15	1	0	95.0	70	130	0.9	5.41	30	
Carbon disulfide	1.270	0.15	1	0	127	70	130	1.24	2.39	30	
Carbon tetrachloride	1.290	0.15	1	0	129	70	130	1.11	15.0	30	
Chlorobenzene	1.180	0.15	1	0	118	70	130	1.04	12.6	30	
Chloroethane	0.9100	0.15	1	0	91.0	70	130	0.88	3.35	30	
Chloroform	1.070	0.15	1	0	107	70	130	1.03	3.81	30	
Chloromethane	0.9800	0.15	1	0	98.0	70	130	0.91	7.41	30	
cis-1,2-Dichloroethene	0.8900	0.15	1	0	89.0	70	130	0.89	0	30	
cis-1,3-Dichloropropene	1.230	0.15	1	0	123	70	130	1.11	10.3	30	
Cyclohexane	1.180	0.15	1	0	118	70	130	1.07	9.78	30	
Dibromochloromethane	1.210	0.15	1	0	121	70	130	1.05	14.2	30	
Ethyl acetate	0.9100	0.25	1	0	91.0	70	130	0.96	5.35	30	
Ethylbenzene	1.160	0.15	1	0	116	70	130	0.98	16.8	30	
Freon 11	1.020	0.15	1	0	102	70	130	0.95	7.11	30	
Freon 113	1.340	0.15	1	0	134	70	130	0.92	37.2	30	SR
Freon 114	0.9900	0.15	1	0	99.0	70	130	0.92	7.33	30	
Freon 12	1.050	0.15	1	0	105	70	130	1.03	1.92	30	
Heptane	1.080	0.15	1	0	108	70	130	0.95	12.8	30	
Hexachloro-1,3-butadiene	1.690	0.15	1	0	169	70	130	1.34	23.1	30	S
Hexane	0.9300	0.15	1	0	93.0	70	130	0.91	2.17	30	
Isopropyl alcohol	0.9200	0.15	1	0	92.0	70	130	0.94	2.15	30	
m&p-Xylene	2.480	0.30	2	0	124	70	130	2.15	14.3	30	
Methyl Butyl Ketone	0.9800	0.30	1	0	98.0	70	130	0.95	3.11	30	
Methyl Ethyl Ketone	0.9300	0.30	1	0	93.0	70	130	0.95	2.13	30	
Methyl Isobutyl Ketone	1.020	0.30	1	0	102	70	130	1.01	0.985	30	
Methyl tert-butyl ether	0.8900	0.15	1	0	89.0	70	130	0.9	1.12	30	
Methylene chloride	1.130	0.15	1	0	113	70	130	0.85	28.3	30	
o-Xylene	1.170	0.15	1	0	117	70	130	0.99	16.7	30	
Propylene	0.9400	0.15	1	0	94.0	70	130	0.92	2.15	30	

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

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CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **LCS1UTD-120409** SampType: **LCSD** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38486**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	1.200	0.15	1	0	120	70	130	1.01	17.2	30	
Tetrachloroethylene	1.250	0.15	1	0	125	70	130	1.09	13.7	30	
Tetrahydrofuran	0.8600	0.15	1	0	86.0	70	130	0.9	4.55	30	
Toluene	1.110	0.15	1	0	111	70	130	1.02	8.45	30	
trans-1,2-Dichloroethene	0.9000	0.15	1	0	90.0	70	130	0.86	4.55	30	
trans-1,3-Dichloropropene	1.180	0.15	1	0	118	70	130	1.02	14.5	30	
Trichloroethene	1.270	0.15	1	0	127	70	130	1.06	18.0	30	
Vinyl acetate	0.7800	0.15	1	0	78.0	70	130	0.77	1.29	30	
Vinyl Bromide	0.9500	0.15	1	0	95.0	70	130	0.91	4.30	30	
Vinyl chloride	0.8700	0.15	1	0	87.0	70	130	0.83	4.71	30	

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **MB1UT-120409** SampType: **MBLK** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38484**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	< 0.15	0.15									
1,1,2,2-Tetrachloroethane	< 0.15	0.15									
1,1,2-Trichloroethane	< 0.15	0.15									
1,1-Dichloroethane	< 0.15	0.15									
1,1-Dichloroethene	< 0.15	0.15									
1,2,4-Trichlorobenzene	< 0.15	0.15									
1,2,4-Trimethylbenzene	< 0.15	0.15									
1,2-Dibromoethane	< 0.15	0.15									
1,2-Dichlorobenzene	< 0.15	0.15									
1,2-Dichloroethane	< 0.15	0.15									
1,2-Dichloropropane	< 0.15	0.15									
1,3,5-Trimethylbenzene	< 0.15	0.15									
1,3-butadiene	< 0.15	0.15									
1,3-Dichlorobenzene	< 0.15	0.15									
1,4-Dichlorobenzene	< 0.15	0.15									
1,4-Dioxane	< 0.30	0.30									
2,2,4-trimethylpentane	< 0.15	0.15									
4-ethyltoluene	< 0.15	0.15									
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.15	0.15									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **MB1UT-120409**	SampType: **MBLK**	TestCode: **1ugM3_TO15**	Units: **ppbV**	Prep Date:	RunNo: **3076**
Client ID: **ZZZZZ**	Batch ID: **R3076**	TestNo: **TO-15**		Analysis Date: **12/4/2009**	SeqNo: **38484**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Dibromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.25	0.25									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									
Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.15	0.15									

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

CLIENT: Arcadis
Work Order: C0912007
Project: LMC Utica

ANALYTICAL QC SUMMARY REPORT

TestCode: 1ugM3_TO15

Sample ID: **MB1UT-120409** SampType: **MBLK** TestCode: **1ugM3_TO15** Units: **ppbV** Prep Date: RunNo: **3076**
Client ID: **ZZZZZ** Batch ID: **R3076** TestNo: **TO-15** Analysis Date: **12/4/2009** SeqNo: **38484**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.15	0.15									

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120406.D Vial: 6
Acq On : 4 Dec 2009 13:01 Operator: RJP
Sample : MB1UT-120409 Inst : MSD #1
Misc : MB1UT-120409 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 13:22:53 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.77	128	17562	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	34957	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	30186	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.51	95	10669	0.77	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 77.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

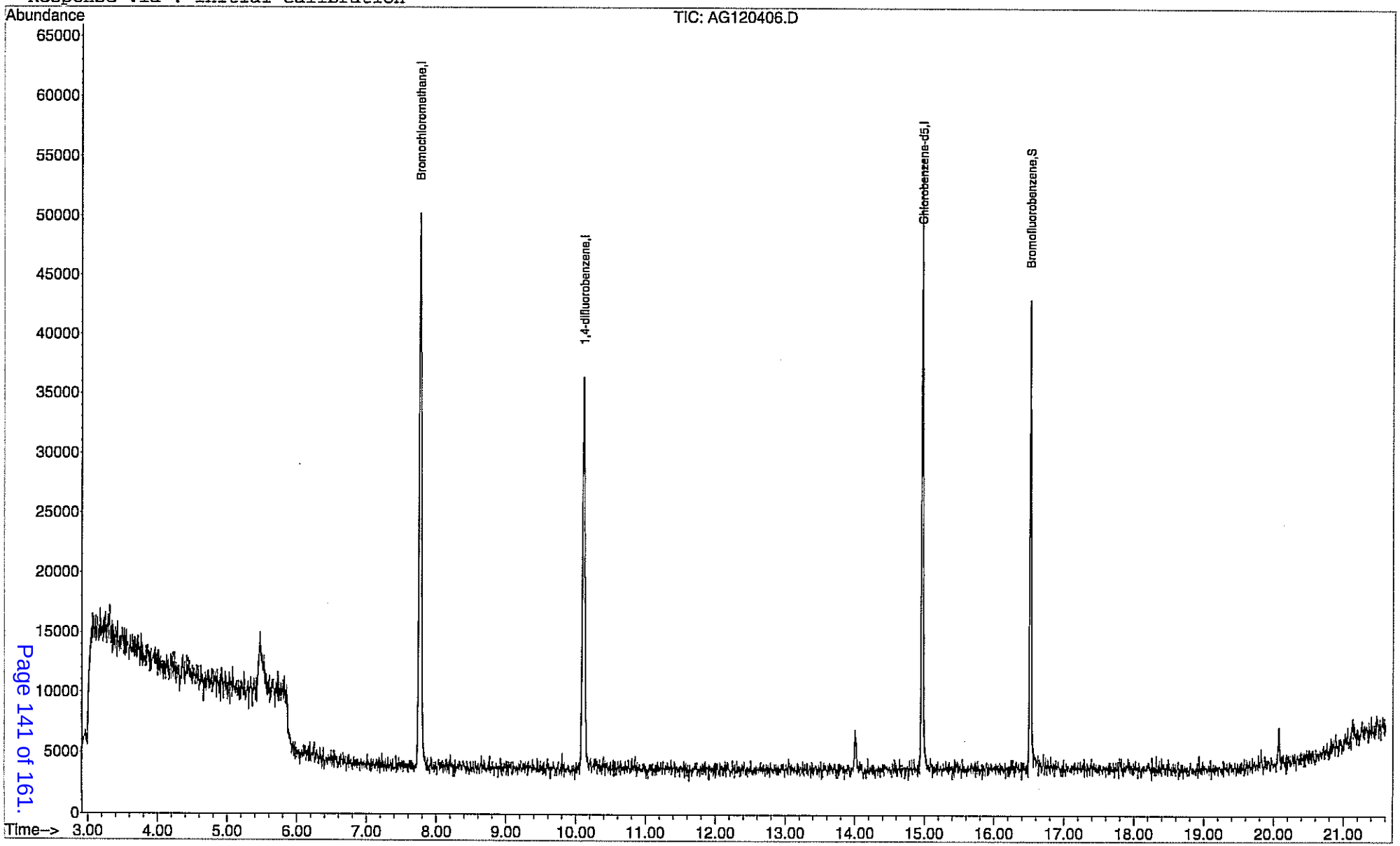
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120406.D
Acq On : 4 Dec 2009 13:01
Sample : MB1UT-120409
Misc : MB1UT-120409
MS Integration Params: RTEINT.P
Quant Time: Dec 4 13:22 2009

Vial: 6
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120405.D Vial: 5
Acq On : 4 Dec 2009 12:28 Operator: RJP
Sample : LCS1UT-120409 Inst : MSD #1
Misc : LCS1UT-120409 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 12:50:26 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.77	128	19186	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	39372	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	37269	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	18061	1.05	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 105.00%				
Target Compounds							Qvalue
2) Propylene	2.97	41	10811	0.92	ppb		95
3) Freon 12	3.00	85	102129	1.03	ppb		100
4) Chloromethane	3.15	50	19471	0.91	ppb		99
5) Freon 114	3.15	85	60100	0.92	ppb		99
6) Vinyl Chloride	3.29	62	16938	0.83	ppb		99
7) 1,3-butadiene	3.36	39	16220	1.00	ppb		85
8) Bromomethane	3.61	94	20852	0.90	ppb		99
9) Chloroethane	3.74	64	6631	0.88	ppb		97
10) Vinyl Bromide	3.99	106	20949	0.91	ppb		95
11) Freon 11	4.20	101	65327	0.95	ppb		99
12) Acetone	4.35	58	6318	0.95	ppb	#	69
13) Isopropyl alcohol	4.46	45	16968	0.94	ppb	#	100
14) 1,1-dichloroethene	4.82	96	19588	0.89	ppb		98
15) Freon 113	5.00	101	45644	0.92	ppb		98
16) Methylene chloride	5.21	84	16140	0.85	ppb		99
17) Allyl chloride	5.20	41	14752	0.88	ppb		96
18) Carbon disulfide	5.34	76	75089	1.24	ppb		100
19) trans-1,2-dichloroethene	6.06	61	24104	0.86	ppb		97
20) methyl tert-butyl ether	6.12	73	29513	0.90	ppb		99
21) 1,1-dichloroethane	6.46	63	40963	0.97	ppb		100
22) Vinyl acetate	6.48	43	14287	0.77	ppb		98
23) Methyl Ethyl Ketone	6.97	43	29711	0.95	ppb		97
24) cis-1,2-dichloroethene	7.34	61	20124	0.89	ppb		97
25) Hexane	6.98	41	14522	0.91	ppb		98
26) Ethyl acetate	7.55	43	20476	0.96	ppb		97
27) Chloroform	7.93	83	69405	1.03	ppb		99
28) Tetrahydrofuran	8.11	42	7270	0.90	ppb		97
29) 1,2-dichloroethane	9.01	62	35498	0.97	ppb		100
31) 1,1,1-trichloroethane	8.72	97	71197	1.16	ppb		99
32) Cyclohexane	9.42	56	14023	1.07	ppb	#	7
33) Carbon tetrachloride	9.36	117	99998	1.11	ppb		99
34) Benzene	9.33	78	52255	1.11	ppb		90
35) 1,4-dioxane	11.14	88	7152	1.15	ppb		94
36) 2,2,4-trimethylpentane	10.30	57	39137	1.00	ppb		97
37) Heptane	10.72	43	11665	0.95	ppb		95
38) Trichloroethene	10.81	130	37528	1.06	ppb		96
39) 1,2-dichloropropane	10.93	63	19821	1.08	ppb		98
40) Bromodichloromethane	11.31	83	68962	1.15	ppb		99
41) cis-1,3-dichloropropene	12.20	75	25009	1.11	ppb		98
42) trans-1,3-dichloropropene	13.00	75	18371	1.02	ppb		90
43) 1,1,2-trichloroethane	13.31	97	35879	1.17	ppb		99
45) Toluene	13.04	92	29069	1.02	ppb		96
46) Methyl Isobutyl Ketone	12.17	43	16497	1.01	ppb		100
47) Dibromochloromethane	13.98	129	77203	1.05	ppb		99
48) Methyl Butyl Ketone	13.53	43	14255	0.95	ppb		96
49) 1,2-dibromoethane	14.22	107	51587	1.09	ppb		99
50) Tetrachloroethylene	14.07	164	44115	1.09	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120405.D Vial: 5
Acq On : 4 Dec 2009 12:28 Operator: RJP
Sample : LCS1UT-120409 Inst : MSD #1
Misc : LCS1UT-120409 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 12:50:26 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

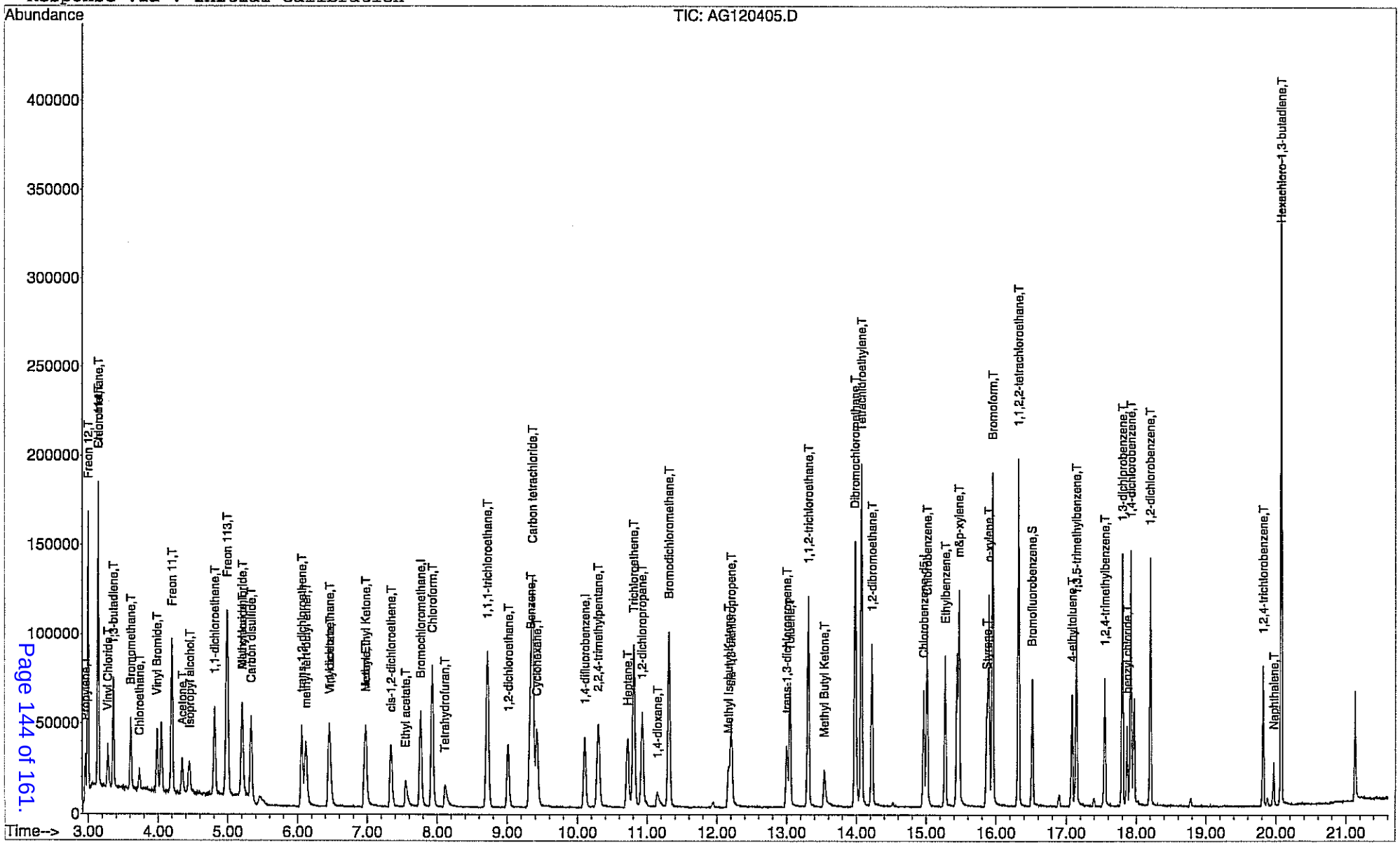
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	55544	1.04	ppb	99
52)	Ethylbenzene	15.27	91	51291	0.98	ppb	97
53)	m&p-xylene	15.46	91	103466	2.15	ppb	98
54)	Styrene	15.86	104	28113	1.01	ppb	100
55)	Bromoform	15.95	173	81665	1.08	ppb	100
56)	o-xylene	15.89	91	59276	0.99	ppb	99
58)	1,1,2,2-tetrachloroethane	16.31	83	72284	1.17	ppb	97
59)	4-ethyltoluene	17.08	105	31840	0.95	ppb	100
60)	1,3,5-trimethylbenzene	17.14	105	48118	1.09	ppb	100
61)	1,2,4-trimethylbenzene	17.54	105	34094	1.06	ppb	100
62)	1,3-dichlorobenzene	17.79	146	55621	1.14	ppb	98
63)	benzyl chloride	17.86	91	23708	1.00	ppb	99
64)	1,4-dichlorobenzene	17.91	146	55490	1.16	ppb	98
65)	1,2-dichlorobenzene	18.19	146	52247	1.15	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	20622	1.14	ppb	100
67)	Naphthalene	19.96	128	14859	0.92	ppb	100
68)	Hexachloro-1,3-butadiene	20.07	225	57186	1.34	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120405.D Vial: 5
Acq On : 4 Dec 2009 12:28 Operator: RJP
Sample : LCS1UT-120409 Inst : MSD #1
Misc : LCS1UT-120409 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 4 12:50 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120429.D Vial: 7
Acq On : 5 Dec 2009 1:42 Operator: RJP
Sample : LCS1UTD-120409 Inst : MSD #1
Misc : LCS1UTD-120409 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 05 02:03:53 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Bromochloromethane	7.76	128	18028	1.00 ppb		0.00
30) 1,4-difluorobenzene	10.10	114	33898	1.00 ppb		0.00
44) Chlorobenzene-d5	14.95	117	32201	1.00 ppb		0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	16135	1.09 ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 109.00%			
Target Compounds						Qvalue
2) Propylene	2.96	41	10344	0.94 ppb		97
3) Freon 12	2.99	85	97310	1.05 ppb		99
4) Chloromethane	3.14	50	19694	0.98 ppb		95
5) Freon 114	3.14	85	60661	0.99 ppb		98
6) Vinyl Chloride	3.28	62	16682	0.87 ppb		98
7) 1,3-butadiene	3.36	39	14770	0.97 ppb		95
8) Bromomethane	3.60	94	20806	0.95 ppb		97
9) Chloroethane	3.73	64	6476	0.91 ppb		86
10) Vinyl Bromide	3.98	106	20598	0.95 ppb		98
11) Freon 11	4.20	101	65841	1.02 ppb		99
12) Acetone	4.34	58	6737	1.08 ppb	#	59
13) Isopropyl alcohol	4.44	45	15712	0.92 ppb	#	100
14) 1,1-dichloroethene	4.81	96	19103	0.93 ppb		97
15) Freon 113	4.98	101	62036m	1.34 ppb		
16) Methylene chloride	5.20	84	20245m	1.13 ppb		
17) Allyl chloride	5.19	41	11309	0.72 ppb		89
18) Carbon disulfide	5.33	76	72358	1.27 ppb		98
19) trans-1,2-dichloroethene	6.05	61	23740	0.90 ppb		99
20) methyl tert-butyl ether	6.11	73	27525	0.89 ppb		99
21) 1,1-dichloroethane	6.44	63	38883	0.98 ppb		98
22) Vinyl acetate	6.47	43	13474	0.78 ppb		95
23) Methyl Ethyl Ketone	6.96	43	27310	0.93 ppb		100
24) cis-1,2-dichloroethene	7.33	61	19072	0.89 ppb		97
25) Hexane	6.97	41	14023	0.93 ppb		96
26) Ethyl acetate	7.54	43	18260	0.91 ppb		98
27) Chloroform	7.92	83	67566	1.07 ppb		99
28) Tetrahydrofuran	8.10	42	6572	0.86 ppb		95
29) 1,2-dichloroethane	9.00	62	34219	0.99 ppb		98
31) 1,1,1-trichloroethane	8.71	97	67356m	1.28 ppb		
32) Cyclohexane	9.42	56	13288	1.18 ppb	#	87
33) Carbon tetrachloride	9.35	117	99721	1.29 ppb		99
34) Benzene	9.31	78	45442	1.12 ppb		93
35) 1,4-dioxane	11.13	88	5817	1.09 ppb		88
36) 2,2,4-trimethylpentane	10.29	57	37832	1.12 ppb		96
37) Heptane	10.71	43	11483	1.08 ppb		95
38) Trichloroethene	10.80	130	38577	1.27 ppb		98
39) 1,2-dichloropropane	10.92	63	19427	1.23 ppb		97
40) Bromodichloromethane	11.30	83	60878m	1.17 ppb		
41) cis-1,3-dichloropropene	12.20	75	23869	1.23 ppb		99
42) trans-1,3-dichloropropene	12.99	75	18387	1.18 ppb		82
43) 1,1,2-trichloroethane	13.30	97	33024m	1.25 ppb		
45) Toluene	13.04	92	27514	1.11 ppb		100
46) Methyl Isobutyl Ketone	12.16	43	14391	1.02 ppb		99
47) Dibromochloromethane	13.97	129	77354	1.21 ppb		99
48) Methyl Butyl Ketone	13.53	43	12645	0.98 ppb		94
49) 1,2-dibromoethane	14.21	107	51275	1.26 ppb		99
50) Tetrachloroethylene	14.06	164	43715	1.25 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120429.D Vial: 7
Acq On : 5 Dec 2009 1:42 Operator: RJP
Sample : LCS1UTD-120409 Inst : MSD #1
Misc : LCS1UTD-120409 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 05 02:03:53 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

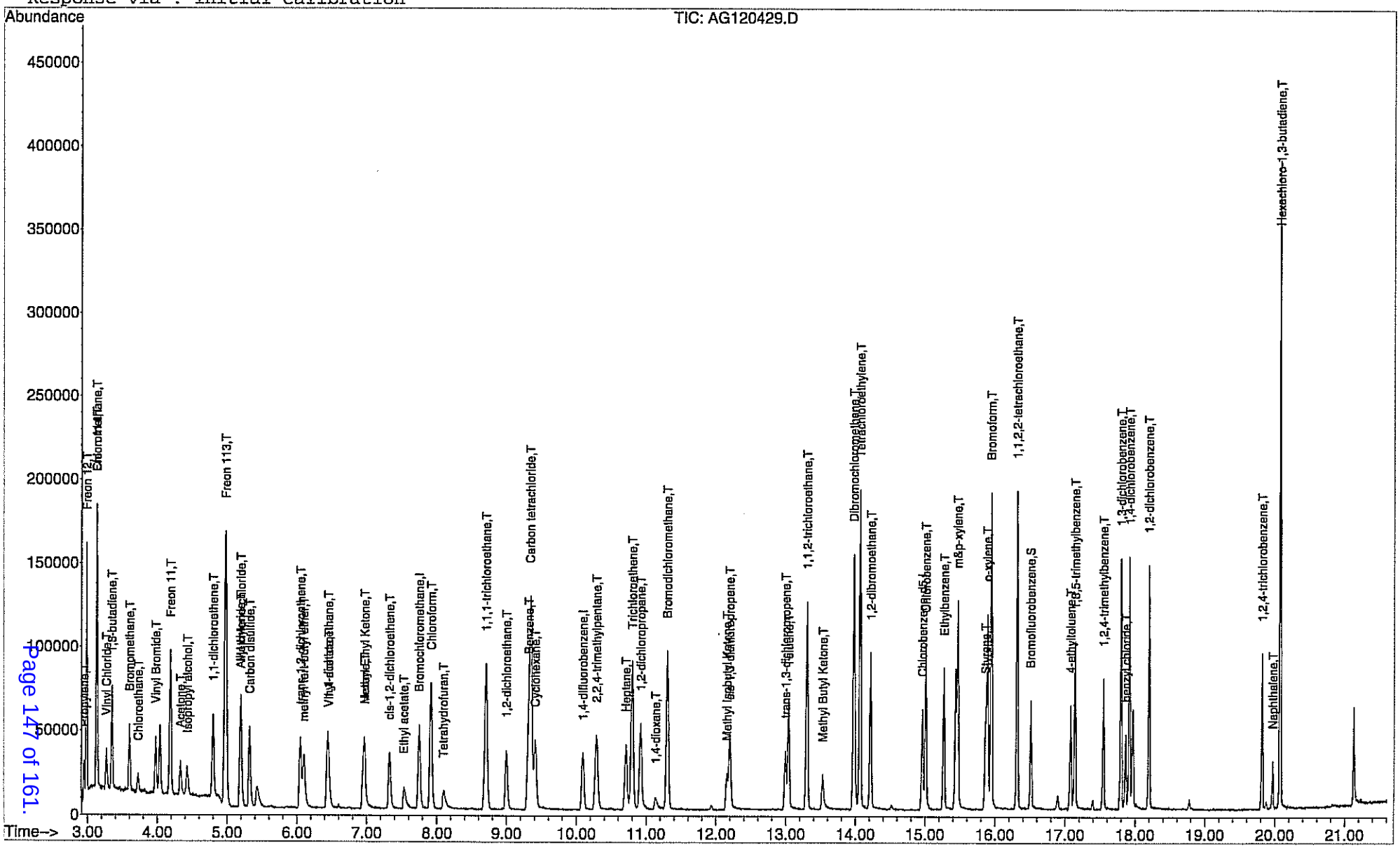
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.00	112	54521	1.18	ppb	99
52)	Ethylbenzene	15.27	91	52108	1.16	ppb	97
53)	m&p-xylene	15.46	91	103089	2.48	ppb	97
54)	Styrene	15.86	104	28879	1.20	ppb	98
55)	Bromoform	15.94	173	82828	1.27	ppb	100
56)	o-xylene	15.89	91	60185	1.17	ppb	97
58)	1,1,2,2-tetrachloroethane	16.31	83	66345m	1.24	ppb	
59)	4-ethyltoluene	17.07	105	31272	1.08	ppb	99
60)	1,3,5-trimethylbenzene	17.13	105	48559	1.27	ppb	99
61)	1,2,4-trimethylbenzene	17.54	105	34788	1.25	ppb	98
62)	1,3-dichlorobenzene	17.79	146	55958m	1.32	ppb	
63)	benzyl chloride	17.86	91	24160	1.18	ppb	100
64)	1,4-dichlorobenzene	17.91	146	56825	1.38	ppb	97
65)	1,2-dichlorobenzene	18.19	146	54222	1.38	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	23788	1.53	ppb	99
67)	Naphthalene	19.96	128	17129	1.23	ppb	97
68)	Hexachloro-1,3-butadiene	20.07	225	62598	1.69	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120429.D Vial: 7
Acq On : 5 Dec 2009 1:42 Operator: RJP
Sample : LCS1UTD-120409 Inst : MSD #1
Misc : LCS1UTD-120409 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:09 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:05 2009
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INJECTION LOG

Centek Laboratories, LLC
Instrument: HP5973 MSD
GC Column: J&W DB-5MS, 1.5u, 60M

Injection Logbook A-MSD

Internal Standard Stock #: 7508
Standard Stock #(s) 7509
LCS Stock #(s)
Method Reference: Toxic Organic Componds in Ambient Air Jan-99

Detection Limit	Login Number	Data File Name	Dil. Factor	Inj Vol cc	MethodQ File	Group Number	Inj. Date	Inj. Time	Comments	CD BackUp#
	BFBIUT	AG111609	-		AN16-1UT		11/16/09	1913		
	A1UT-2.0	11	-							
	1.50	12	-							
	1.25	13	-							
	1.0	14	-	200						
	0.75	15	-							
	0.50	16	-							
	0.30	17	-							
	0.15	18	-				11/17/09	0013		
	0.10	19	-							
	0.04	21	-					0150		

Analyzed by:

Page No: 112

Centek Laboratories, LLC
Instrument: HP5973 MSD
GC Column: J&W DB-5MS, 1.5u, 60M

Injection Logbook A-MSD

Internal Standard Stock #: 7541
Standard Stock #(s) 7537
LCS Stock #(s) 7538
Method Reference: Toxic Organic Compounds in Ambient Air Jan-99

Detection Limit	Login Number	Data File Name	Dil. Factor	Inj Vol cc	MethodQ File	Group Number	Inj. Date	Inj. Time	Comments	CD BackUp#
	BFBIUT	AG120401	-	-	ANIG-IUT		12/4/09	0902		
	AIUT-1.0	04	-	200						
	LCSIUT-120409	05	-							
	MBIUT ↓	06	-							
	WAG120409A	07	-							
	B	08	-							
	C	09	-							
	D	10	-							
	E	11	-							
	F	12	-							
	G	13	-							
	COS12009-001	14	-							
	002	15	-							
	003	16	-							
	004	17	-							
	005	18	-							
	006	19	-							
	007	20	-							
	008	21	-							
	009	22	-							
	010	23	-							
	011	24	-							
	012	25	-				↓			
	COS12007-001	26	-				12/5/09	0005		
	002	27	-							
	003	28	-							
	LCSIUTO-120409	29	-	↓						
	COS12009-001DL	30	5	40	↓		↓	0213		

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Analyzed by:

Centek Laboratories, LLC
Instrument: HP5973 MSD
GC Column: J&W DB-5MS, 1.5u, 60M

Injection Logbook A-MSD

Internal Standard Stock #: 2541
Standard Stock #(s) _____
LCS Stock #(s) _____
Method Reference: Toxic Organic Compounds in Ambient Air Jan-99

Detection Limit	Login Number	Data File Name	Dil. Factor	Inj Vol cc	MethodQ File	Group Number	Inj. Date	Inj. Time	Comments	CD BackUp#
	CO512009-002 01	AG120431	5	40	AN16-1UT		12/5/09	0244		
	003	32	↓	↓	↓		↓	↓		
	004	33								
	005	34	↓	↓						
	006	35	10	20						
	007	36	↓	↓						
	008	37								
	009	38								
	010	39								
	011	40								
	012	41								
	CO512007-002	42								
	003 ↓	43	↓	↓	↓		↓	0505		
	BLK	44	-	-						

Analyzed by: _____

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GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS LOG

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
4183	6/12/08	6/19/08	TO15IVT LCS	4180	50ppb	0.9psig	45psia	1ppb	MP	
4184	6/18/08	6/24/08	H2S 1ppm	2058	10ppm	3.0psig	30psia	1ppm	MP	
4185	6/17/08	6/24/08	TO15 IS	4127	1ppm	1.5psig	30psia	50ppb		
4186	↓	↓	STD	2063/2064	↓	↓	↓	↓		
4187			LCS	2056/2057						
4188			TO15IVT IS A	4185	50ppb	0.9psig	45psia	1ppb		
4189			STD A	4186						
4190	↓	↓	LCS	4187	↓	↓	↓	↓		
4191	6/19/08	6/24/08	TO15IVT IS A	4185	50ppb	0.9psig	45psia	1ppb		
4192	6/20/08	6/21/09	TO14 STD	Lot# 8122015	1ppm	1800psig	Scott Gases	1ppm	LL	
4193	6/20/08	6/21/09	TO15 STD	Lot # 8165015	1ppm	1000psig	Scott Gases	1ppm	LL	
4194	6/20/08	6/27/08	TO15 IS	4127	1ppm	1.5psig	30psia	50ppb		
4195	↓	↓	STD	4192/4193						
4196	↓	↓	LCS	2056/2057	↓	↓	↓	↓	↓	
4197	6/23/08	6/27/08	TO15IVT IS	4194	50ppb	0.9psig	45psia	1ppb	MP	
4198	↓	↓	STD	4195						
4199	↓	↓	LCS	4196	↓	↓	↓	↓	↓	
5000	6/23/08	6/27/08	H2S 1ppm	2058	10ppm	3.0psig	30psia	1ppm	MP	

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
6117	11/11/08	11/14/08	TO15IUT IS^A	6112	50ppb	0.5psig	30psia	1 ppb	SM	
6118	11/12/08	11/09	TO15 IS	AB-2253	1 ppm	SPECTRA GASES			mp	
6119	↓	↓	TO15 SUBSET	AB-2274	↓	↓	↓	↓	↓	
6120	↓	↓	TO14 MIX	AB-2238	↓	↓	↓	↓	↓	
6121	11/14/08	11/21/08	TO15 IS	6118	1ppm	1.5psig	30psia	50 ppb	mp	
6122	↓	↓	↓ STD	4192/4193	↓	↓	↓	↓	↓	
6123	↓	↓	↓ LCS	2056/2057	↓	↓	↓	↓	↓	
6124	↓	↓	TO15IUT IS^A	6121	50ppb	0.5psig	45psia	1ppb	↓	
6125	↓	↓	↓ STD^A	6122	↓	↓	↓	↓	↓	
6126	↓	↓	↓ LCS	6123	↓	↓	↓	↓	↓	
6127	11/15/08	↓	TO15IUT IS^A	6121	50 ppb	0.5psig	45psia	1ppb	↓	
6128	11/17/08	11/21/08	TO15IUT IS^B	6121	↓	↓	↓	↓	↓	
6129	↓	↓	↓ STD^B	6122	↓	↓	↓	↓	↓	
6130	↓	↓	↓ IS^A	↓	↓	↓	↓	↓	↓	
6131	11/18/08	↓	↓ IS^A	↓	↓	↓	↓	↓	↓	
6132	↓	↓	↓ IS^B	↓	↓	↓	↓	↓	↓	
6133	11/19/08	↓	↓ IS^A	↓	↓	↓	↓	↓	↓	
6134	↓	↓	↓ IS^B	↓	↓	↓	↓	↓	↓	

Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
7365	8/30/09	8/31/09	TO15IVT IS^{A}	7352	50ppb	0.9psig	45psia	1ppb	MP	
7366	8/31/09	9/10	TO15 IS	06503 003	1ppm	SCOTT GASES		1ppm	MP	
7367	8/31/09	9/6/09	TO15 IS	7366	1ppm	1.5psig	30psia	50ppb	MP	
7368	↓	↓	STD	6119/20	↓	↓	↓	↓		
7369			LCS	6192/93						
7370			SIL/SUL	6194						
7371			TO15IVT IS^{A}	7367	50ppb	0.9psig	45psia	1ppb		
7372			STD^{A}	7368						
7373			LCS	7369						
7374	9/1/09		TO15IVT IS^{A}	7367						
7375	9/2/09	↓	↓	↓	↓	↓	↓	↓		
7376	9/1/09	9/6/09	TO15IVT IS$^{(B)}$	7367	50ppb	0.9psig	45psia	1ppb	I.L.	
7377	↓	↓	↓ STD$^{(B)}$	7368	↓	↓	↓	↓	↓	
7378	9/2/09	9/6/09	TO15IVT IS$^{(B)}$	7367	50ppb	0.9psig	45psia	1ppb	I.L.	
7379	9/2/09	9/6/09	↓ IS$^{(A)}$	7367	↓	↓	↓	↓	I.L.	
7380	9/3/09	9/10/09	TO15 IS	7366	1ppm	1.5psig	30psia	50ppb	I.L.	
7381	9/3/09	9/10/09	TO15IVT IS$^{(A)}$	7380	50ppb	0.9psig	45psia	1ppb	I.L.	
7382	9/3/09	9/10/09	↓ IS$^{(B)}$	7380	↓	↓	↓	↓	↓	
7382A	8/31/09	9/6/09	TO15IVT IS$^{(B)}$	7367	50ppb	0.9psig	45psia	1ppb	I.L.	
7382B	↓	↓	↓ STD$^{(B)}$	7368	↓	↓	↓	↓	↓	

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Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
7515	11/23/09	11/30/09	TO15 SUL/SOX	6194	1ppm	1.5psig	30psia	1ppb	mp	
7520	↓	↓	10ppm FORM	7068	36.5%	1.1UL	50psia	10ppm	↓	
7521			50ppb ↓	7520	10ppm	0.23psig	45psia	50 ppb		
7522			TO15/UG IS A	7516	50ppb	0.5psig	45psia	50ppb		
7523			STD A	7517	↓	↓	↓	↓		
7524			LCS	7518						
7525			IS B	7516						
7526	↓		STD B	7517						
7527	11/24/09		IS A	7516						
7528	↓		IS B							
7529	11/25/09	↓	IS A	↓	↓	↓	↓	↓	↓	
7530	11/30/09	12/7/09	TO15 IS	7366	1ppm	1.5psig	30psia	1ppb	mp	
7531	↓	↓	STD	6115-6120 ~~7514~~	↓	↓	↓	↓	↓	
7532			LCS	4192-93 ~~7366~~						
7533			SUL/SOX	~~6115/6154~~ 6194						
7534			10ppm / FORM	~~4192~~ 7068	36.5%	1.1UL	50psia	10ppm		
7535			50ppb / ↓	7534	10ppm	0.23psig	45psia	50ppb		
7536	↓	↓	TO15/UT IS A	~~7366~~ 7531	50ppb	0.5psig	45psia	50ppb	↓	

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Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
7537	11/30/09	12/7/09	TOLUENE STD A	7531	50ppb	0.9 psig	45 psia	50ppb	MD	
7538	↓	↓	LCS	7532	↓	↓	↓	↓	↓	
7539	12/1/09		IS A	7530						
7540	12/4/09		IS A	↓						
7541	↓		IS B							
7542	↓	↓	STD B	7531	↓	↓	↓	↓	↓	

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GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CANISTER CLEANING LOG

Centek Laboratories, LLC

Instrument: Entech 3100

QC Canister Cleaning &
Maintenance Logbook

Canister Number	QC Can Number	Number of Cycles	Date	QC Batch Number	Maintenance
462	241	30	11/17/09	WAC111709F	1ug/m³, 25 TCE, VT, CT
219					
130					
320					
241					
553	422	30	11/17/09	WAC111709G	
324					
244					
235					
422					
239	314	30	11/17/09	WAC111709H	
326					
495					
274					
314					
360	S-49	30	11/17/09	WAC111709I	
477					
429					
139					
S-49					

Cleaned by: _____

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111710.D Vial: 26
Acq On : 17 Nov 2009 16:17 Operator: RJP
Sample : WAC111709F Inst : MSD #1
Misc : 1UG + 0.25 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 16:39:19 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

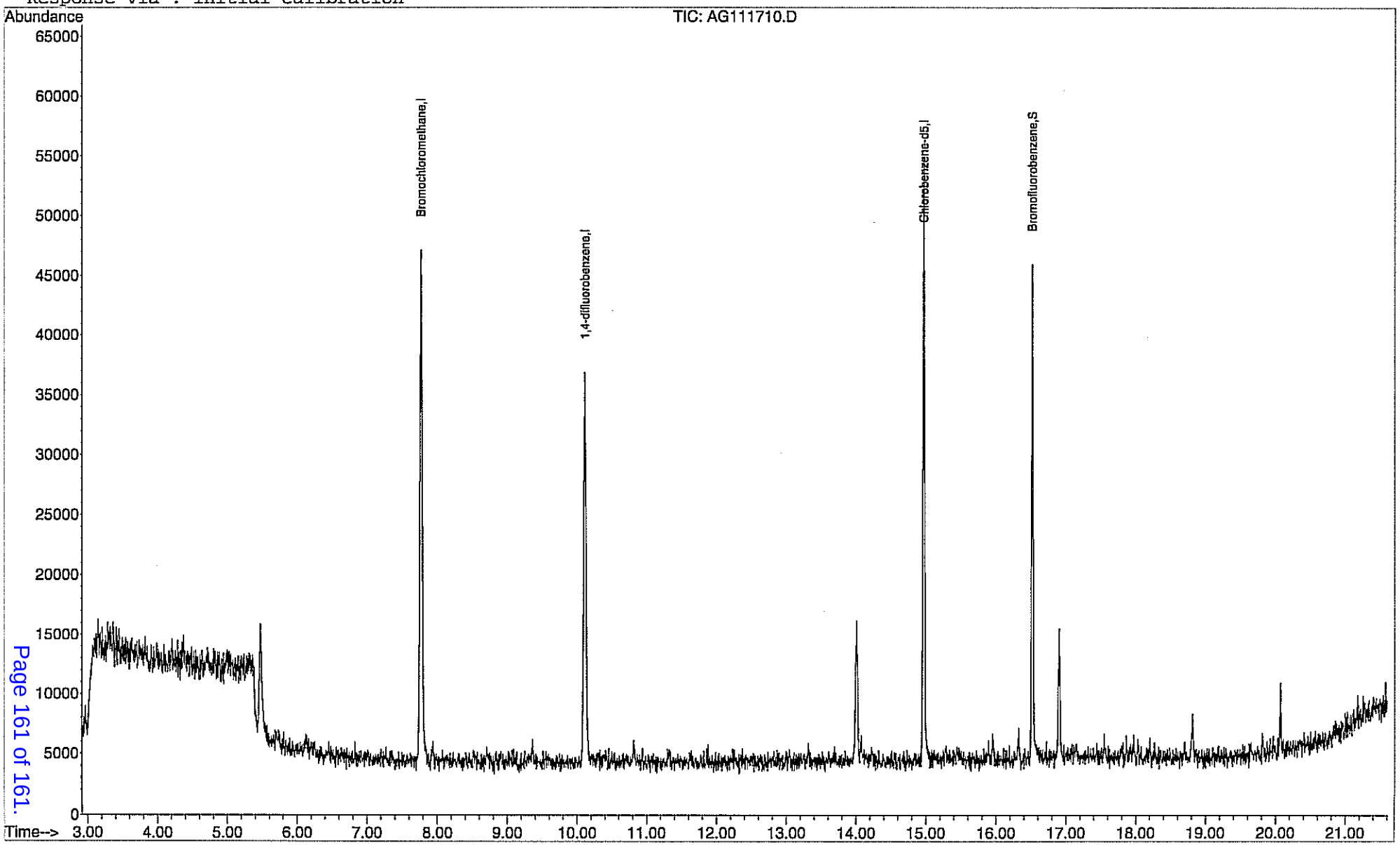
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.78	128	15307	1.00	ppb	0.01
30) 1,4-difluorobenzene	10.11	114	33709	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	29307	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.51	95	11173	0.83	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 83.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111710.D Vial: 26
Acq On : 17 Nov 2009 16:17 Operator: RJP
Sample : WAC111709F Inst : MSD #1
Misc : 1UG + 0.25 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 16:39 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Wed Dec 16 16:16:06 2009
Response via : Initial Calibration



Centek Laboratories, LLC
October

143 Midler Park Drive
Syracuse, NY 13206
(315) 431-9730
www.CentekLabs.com

Arcadis

Sample Data Package
December 18, 2009

Utica- Soil Vapor

C0912043

Volume 1 of 1

- **Work Order Summary**
- **Analytical Results Summary**
- **Quality Control Summary**
- **Sample Data**
- **Standards Data**
- **Raw Data**

CONFIDENTIAL

TO-15 Package Review Checklist

Client: ARCADIS Project: UTICA SDG: C09/2043

		YES	NO	NA
Analytical Results	Present and Complete	✓		
TIC's present	Present and Complete	✓		
	Holding Times Met	✓		

Comments:

Chain-of-Custody	Present and Complete	✓		
Surrogate Recovery	Present and Complete	✓		
	Recoveries within limits	✓		
	Sample(s) reanalyzed	✓		
Internal Standards Recovery	Present and Complete	✓		
	Recoveries within limits		✓	
	Sample(s) reanalyzed	✓		

Comments: *SEE CASE NARRATIVE

Lab Control Sample (LCS)	Present and Complete	✓		
	Recoveries within limits	✓		
Lab Control Sample Dupe (LCSD)	Present and Complete	✓		
	Recoveries within limits	✓		
MS/MSD	Present and Complete			✓
	Recoveries within limits			✓

Comments:

Sample Raw Data	Present and Complete	✓		
	Spectra present for all samples	✓		

Comments:

TO-15 Package Review Checklist

Client: ARCADIS Project: UTICA SDG: C0512047

		YES	NO	NA
Standards Data				
Initial Calibration Summary	Present and Complete	✓		
	Calibration(s) met criteria	✓		
Continuing Calibration Summary	Present and Complete	✓		
	Calibration(s) met criteria	✓		
Standards Raw Data	Present and Complete	✓		

Comments:

Raw Quality Control Data				
Tune Criteria Report	Present and Complete	✓		
Method Blank Data	MB Results <PQL	✓		
	Associated results flagged "B"			✓
LCS sample data	Present and Complete	✓		
LCSD sample data	Present and Complete	✓		
MS/MSD sample data	Present and Complete			✓

Comments:

Logbooks				
Injection Log	Present and Complete	✓		
Standards Log	Present and Complete	✓		
Can Cleaning Log	Present and Complete	✓		
	Raw Data Present	✓		
Calculation sheet	Present and Complete	✓		
IDL's	Present and Complete	✓		
Bottle Order Form	Present and Complete	✓		
Sample Tracking Form	Present and Complete	✓		

Additional Comments:

Section Supervisor: [signature] Date: 1/18/10

QC Supervisor: [signature] Date: 1/15/10

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206

Phone (315) 431-9730 * Fax (315) 431-9731 * Emergency 24/7 (315) 416-2751

NELAC Certificate No. 11830

www.CentekLabs.com

Thursday, December 24, 2009

Mr. Jeffrey Bonsteel
Arcadis
465 New Karner Road
First Floor
Albany, NY 12205

TEL: (518) 452-7826
FAX 716-655-4307

RE: Utica - Soil Vapor

Dear Mr. Jeffrey Bonsteel: Order No.: C0912043

Centek Laboratories, LLC received 2 sample(s) on 12/21/2009 for the analyses presented in the following report.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

Please contact us at (315) 431-9730, if you would like any additional information regarding this report.

Sincerely,

Russell Pellegrino
Laboratory Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages.

ASP CAT B DELIVERABLE PACKAGE
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2. Case Narrative
   a. Corrective actions

3. Sample Summary Form

4. Sample Tracking Form

5. Bottle Order

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   a. Form 1

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   a. Qc Summary Report
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   d. LCS Summary Report
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   g. Calculation

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   a. Form 1 (if requested) TIC's
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    b. LCS
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    b. Standards Log Book
    c. QC Canister Log Book

Centek Laboratories, LLC

Date: *18-Jan-10*

CLIENT: Arcadis
Project: Utica - Soil Vapor
Lab Order: C0912043

CASE NARRATIVE

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.See Corrective Action: [1688] IS did not meet criteria.

Centek Laboratories, LLC

Corrective Action Report

Date Initiated: 22-Dec-09 **Corrective Action Report ID:** 1688

Initiated By: Russell Pellegrino **Department:** MSVOA

Corrective Action Description

CAR Summary: IS did not meet criteria.

Description of Nonconformance: IS was high and did not meet criteria for samples C0912043-002. Based on the chromatographic evidence this is most likely due matrix interference.

Description of Corrective Action: The sample was analyzed further as a dilution with result meeting criteria. All sets of data submitted.

Performed By: Russell Pellegrino **Completion Date:** 23-Dec-09

Client Notification

Client Notification Required: No **Notified By:**

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: No further corrective action taken. All sets of data submitted.

Approval and Closure

Technical Director / Deputy Tech. Dir.: Russell Pellegrino **Close Date:** 23-Dec-09

QA Officer Approval: Nick Scala **QA Date:** 23-Dec-09

Last Updated BY russ Updated: 18-Jan-2010 2:41 PM Reported: 18-Jan-2010 2:41 PM

Centek Laboratories, LLC

143 Midler Park Drive
Syracuse, NY 13206
Phone: 315-431-9730 Fax: 315-431-9731 Emergency: 315-416-2752

Chain of Custody

Site Name: LMC Utica
Project:
PO#: NJ000637.1.2
Other:

Detection Limit	Report Level
☐ 5ppbv	☐ Level I
☐ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE .25	☐ Cat "B" Like

Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	12/28
4 Business Days	☐	35%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
Next Day by 5pm	☐	100%	
Next Day by Noon	☐	150%	
Same Day	☐	200%	

Company: Arcadis
Report: Jeff Bonsteel
465 New Karner Rd First floor
Albany NY 12205
Phone: 518-452-7826
Fax: 518-452-7086
Email: JBonsteel@Arcadis-US.com

Company: Arcadis
Invoice: SAME
Phone:
Fax:
Email:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Comments	Vacuum Start/Stop
AMB-121809	12/18/09	199	119	TO-15		-31/-8
PZ-21	↓	330	403	TO-15		-29/-5

9/2043

CO

Chain of Custody	Print Name	Signature	Date/Time	Courier:
Sampled by:	Daniel Zuch		12/18/09	1500
Relinquished by:	Daniel Zuch			
Received at Lab by:	Jeff Scala		12-18-09 3:30pm	

www.CentekLabs.com

Centek Laboratories, LLC

Date: *18-Jan-10*

CLIENT: Arcadis
Project: Utica - Soil Vapor
Lab Order: C0912043

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C0912043-001A	AMB-121806	199,19	12/18/2009	12/21/2009
C0912043-002A	PZ-21	330,403	12/18/2009	12/21/2009

Centek Laboratories, LLC

Sample Receipt Checklist

Client Name **ARCADIS - ALBANY** Date and Time Receive **12/21/2009**

Work Order Numbe **C0912043** Received by JDS

Checklist completed by _____ 12/18/09 Reviewed by _____ 12/21/09
Signature Date Initials Date

Matrix: Carrier name Courier (Centek)

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☐	No ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☑	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Sample ID:	Action:	ActionDate:	Person:	NewLocation:
C0912043-001A	Login	12/21/2009 10:27:34 AM	russ	Sample Log In
C0912043-002A	Login	12/21/2009 10:29:31 AM	russ	Sample Log In
C0912043-001A	Transfer	12/22/2009 11:46:47 AM	ADM	GC/MS Lab
C0912043-002A	Transfer	12/22/2009 11:46:47 AM	ADM	GC/MS Lab
C0912043-001A	Mark as Consumed	12/24/2009 2:42:36 PM	ADM	Consumed
C0912043-002A	Mark as Consumed	12/24/2009 2:42:36 PM	ADM	Consumed

Lab Order: C0912043
Client: Arcadis
Project: Utica - Soil Vapor

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C0912043-001A	AMB-121806	12/18/2009	Air	1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			12/22/2009
C0912043-002A	PZ-21			1ug/M3 by Method TO15			12/22/2009
				1ug/M3 by Method TO15			12/22/2009

Centek Laboratories, LLC
143 Midler Park Drive
Syracuse, NY 13206
TEL: *3154319730* FAX: *3154319731*

BOTTLE ORDER

1590

18-Jan-10

SHIPPED TO:

Company: Arcadis
Contact: Mr. Jeff Bonsteel
Address: 465 New Karner Road
First Floor
Albany, NY 12205
Phone: 518-452-7826
Quote ID: 0
Project:

Submitted By:

Ship Date: 12/15/2009
VIA: Courier (Centek)
Due Date: 12/17/2009

Bottle Code	Bottle Type	TEST(s)	QTY
MC1000CC	1L Mini-Can	1ug/M3 by Method TO15	3

Can / Reg ID	Description
330	1L Mini-Can - 1293
319	1L Mini-Can - 1282
336	1L Mini-Can - 1299
199	1L Mini-Can - 1154
119	Time-Set Reg - 623
397	Time-Set Reg - 776
403	Time-Set Reg - 782

Comments: 2 1L @ 2hr / 1 1L@ 8hr / Full He setup drop off equipment at the Syracuse Office Loading Dock at 6723 Towpath Rd. East Syracuse Attn: Dan Zuck WAC 120409 E-G

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

ANALYTICAL RESULTS

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-7			"Hg		12/21/2009
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/22/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/22/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/22/2009
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/22/2009
Acetone	2.5	0.30		ppbV	1	12/22/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Benzene	0.19	0.15		ppbV	1	12/22/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Bromoform	< 0.15	0.15		ppbV	1	12/22/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/22/2009
Carbon disulfide	< 0.15	0.15		ppbV	1	12/22/2009
Carbon tetrachloride	0.070	0.040		ppbV	1	12/22/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/22/2009
Chloroform	< 0.15	0.15		ppbV	1	12/22/2009
Chloromethane	0.27	0.15		ppbV	1	12/22/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/22/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/22/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 11	0.16	0.15		ppbV	1	12/22/2009
Freon 113	< 0.15	0.15		ppbV	1	12/22/2009
Freon 114	< 0.15	0.15		ppbV	1	12/22/2009
Freon 12	0.37	0.15		ppbV	1	12/22/2009
Heptane	< 0.15	0.15		ppbV	1	12/22/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
Hexane	< 0.15	0.15		ppbV	1	12/22/2009
Isopropyl alcohol	0.28	0.15		ppbV	1	12/22/2009
m&p-Xylene	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/22/2009
Methylene chloride	< 0.15	0.15		ppbV	1	12/22/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/22/2009
Propylene	< 0.15	0.15		ppbV	1	12/22/2009
Styrene	< 0.15	0.15		ppbV	1	12/22/2009
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/22/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/22/2009
Toluene	0.18	0.15		ppbV	1	12/22/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Trichloroethene	< 0.040	0.040		ppbV	1	12/22/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl chloride	< 0.040	0.040		ppbV	1	12/22/2009
Surr: Bromofluorobenzene	71.0	70-130		%REC	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/22/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/22/2009
1,2,4-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/22/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/22/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/22/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/22/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/22/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/22/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/22/2009
4-ethyltoluene	< 0.75	0.75		ug/m3	1	12/22/2009
Acetone	6.0	0.72		ug/m3	1	12/22/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/22/2009
Benzene	0.62	0.49		ug/m3	1	12/22/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/22/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/22/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/22/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/22/2009
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/22/2009
Carbon tetrachloride	0.45	0.26		ug/m3	1	12/22/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/22/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/22/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/22/2009
Chloromethane	0.57	0.31		ug/m3	1	12/22/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/22/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/22/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/22/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/22/2009
Freon 11	0.91	0.86		ug/m3	1	12/22/2009
Freon 113	< 1.2	1.2		ug/m3	1	12/22/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	1.9	0.75		ug/m3	1	12/22/2009
Heptane	< 0.62	0.62		ug/m3	1	12/22/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/22/2009
Hexane	< 0.54	0.54		ug/m3	1	12/22/2009
Isopropyl alcohol	0.70	0.37		ug/m3	1	12/22/2009
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/22/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/22/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/22/2009
Methylene chloride	< 0.53	0.53		ug/m3	1	12/22/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/22/2009
Propylene	< 0.26	0.26		ug/m3	1	12/22/2009
Styrene	< 0.65	0.65		ug/m3	1	12/22/2009
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/22/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/22/2009
Toluene	0.69	0.57		ug/m3	1	12/22/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Trichloroethene	< 0.22	0.22		ug/m3	1	12/22/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/22/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/22/2009
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-5			"Hg		12/21/2009
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.61	0.15		ppbV	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trimethylbenzene	2.6	0.15		ppbV	1	12/22/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/22/2009
1,3,5-Trimethylbenzene	0.42	0.15		ppbV	1	12/22/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
1,3-Dichlorobenzene	0.39	0.15		ppbV	1	12/22/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/22/2009
2,2,4-trimethylpentane	0.35	0.15		ppbV	1	12/22/2009
4-ethyltoluene	0.74	0.15		ppbV	1	12/22/2009
Acetone	1.6	0.30		ppbV	1	12/22/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Benzene	1.4	0.15		ppbV	1	12/22/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Bromoform	< 0.15	0.15		ppbV	1	12/22/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/22/2009
Carbon disulfide	0.49	0.15		ppbV	1	12/22/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/22/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/22/2009
Chloroform	1.7	0.15		ppbV	1	12/22/2009
Chloromethane	0.13	0.15	J	ppbV	1	12/22/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Cyclohexane	1.2	0.15		ppbV	1	12/22/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/22/2009
Ethylbenzene	1.4	0.15		ppbV	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.11	0.15	J	ppbV	1	12/22/2009
Freon 113	0.16	0.15		ppbV	1	12/22/2009
Freon 114	< 0.15	0.15		ppbV	1	12/22/2009
Freon 12	0.34	0.15		ppbV	1	12/22/2009
Heptane	0.90	0.15		ppbV	1	12/22/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
Hexane	1.7	0.15		ppbV	1	12/22/2009
Isopropyl alcohol	4.2	3.0		ppbV	20	12/22/2009
m&p-Xylene	2.8	6.0	J	ppbV	20	12/22/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/22/2009
Methylene chloride	< 0.15	0.15		ppbV	1	12/22/2009
o-Xylene	1.7	0.15		ppbV	1	12/22/2009
Propylene	< 0.15	0.15		ppbV	1	12/22/2009
Styrene	< 0.15	0.15		ppbV	1	12/22/2009
Tetrachloroethylene	0.45	0.15		ppbV	1	12/22/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/22/2009
Toluene	5.6	3.0		ppbV	20	12/22/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Trichloroethene	0.55	0.15		ppbV	1	12/22/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Surr: Bromofluorobenzene	111	70-130		%REC	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	3.4	0.83		ug/m3	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/22/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/22/2009
1,2,4-Trimethylbenzene	13	0.75		ug/m3	1	12/22/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/22/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/22/2009
1,3,5-Trimethylbenzene	2.1	0.75		ug/m3	1	12/22/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/22/2009
1,3-Dichlorobenzene	2.4	0.92		ug/m3	1	12/22/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/22/2009
2,2,4-trimethylpentane	1.7	0.71		ug/m3	1	12/22/2009
4-ethyltoluene	3.7	0.75		ug/m3	1	12/22/2009
Acetone	3.9	0.72		ug/m3	1	12/22/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/22/2009
Benzene	4.7	0.49		ug/m3	1	12/22/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/22/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/22/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/22/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/22/2009
Carbon disulfide	1.6	0.47		ug/m3	1	12/22/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/22/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/22/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/22/2009
Chloroform	8.5	0.74		ug/m3	1	12/22/2009
Chloromethane	0.27	0.31	J	ug/m3	1	12/22/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Cyclohexane	4.3	0.52		ug/m3	1	12/22/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/22/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/22/2009
Ethylbenzene	6.0	0.66		ug/m3	1	12/22/2009
Freon 11	0.63	0.86	J	ug/m3	1	12/22/2009
Freon 113	1.2	1.2		ug/m3	1	12/22/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	1.7	0.75		ug/m3	1	12/22/2009
Heptane	3.7	0.62		ug/m3	1	12/22/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/22/2009
Hexane	6.1	0.54		ug/m3	1	12/22/2009
Isopropyl alcohol	10	7.5		ug/m3	20	12/22/2009
m&p-Xylene	12	26	J	ug/m3	20	12/22/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/22/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/22/2009
Methylene chloride	< 0.53	0.53		ug/m3	1	12/22/2009
o-Xylene	7.4	0.66		ug/m3	1	12/22/2009
Propylene	< 0.26	0.26		ug/m3	1	12/22/2009
Styrene	< 0.65	0.65		ug/m3	1	12/22/2009
Tetrachloroethylene	3.1	1.0		ug/m3	1	12/22/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/22/2009
Toluene	21	11		ug/m3	20	12/22/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Trichloroethene	3.0	0.82		ug/m3	1	12/22/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/22/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/22/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

QUALITY CONTROL SUMMARY

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AG122203.D
Tune Time : 22 Dec 2009 9:10

Daily Calibration File : C:\HPCHEM\1\DATA\AG122203.D

		(BFB)	(IS1)	(IS2)	(IS3)
			19077	39972	35792
File	Sample	Surrogate Recovery %	Internal Standard Responses		
AG122204.D	LCS1UT-122209	107	19489	42580	39454
AG122205.D	MB1UT-122209	73	19166	39757	33879
AG122206.D	C0912043-001A	71	16469	32827	28104
AG122217.D	C0912043-002A	111	21683	57605*	56870*
AG122218.D	C0912043-002A	84 DL20x	20658	48151	42557
AG122228.D	LCS1UTD-12220	103	19293	40988	38634

t - fails 24hr time check * - fails criteria

Created: Sat Jan 16 11:45:39 2010 MSD #1/

Centek Laboratories, LLC

Date: 16-Jan-10

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor
Test No: TO-15 **Matrix:** A

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	BR4FBZ						
C0912043-001A	71.0						
C0912043-002A	111						
LCS1UT-122209	107						
LCS1UTD-122209	103						
MB1UT-122209	73.0						

Acronym		Surrogate	QC Limits
BR4FBZ	=	Bromofluorobenzene	70-130

*** Surrogate recovery outside acceptance limits**

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **MB1UT-122209** SampType: **MBLK** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	< 0.15	0.15									
1,1,2,2-Tetrachloroethane	< 0.15	0.15									
1,1,2-Trichloroethane	< 0.15	0.15									
1,1-Dichloroethane	< 0.15	0.15									
1,1-Dichloroethene	< 0.15	0.15									
1,2,4-Trichlorobenzene	< 0.15	0.15									
1,2,4-Trimethylbenzene	< 0.15	0.15									
1,2-Dibromoethane	< 0.15	0.15									
1,2-Dichlorobenzene	< 0.15	0.15									
1,2-Dichloroethane	< 0.15	0.15									
1,2-Dichloropropane	< 0.15	0.15									
1,3,5-Trimethylbenzene	< 0.15	0.15									
1,3-butadiene	< 0.15	0.15									
1,3-Dichlorobenzene	< 0.15	0.15									
1,4-Dichlorobenzene	< 0.15	0.15									
1,4-Dioxane	< 0.30	0.30									
2,2,4-trimethylpentane	< 0.15	0.15									
4-ethyltoluene	< 0.15	0.15									
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.040	0.040									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: MB1UT-122209	SampType: MBLK	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39116

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Dibromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.25	0.25									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									
Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: MB1UT-122209	SampType: MBLK	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39116

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.040	0.040									
Surr: Bromofluorobenzene	0.7300	0	1	0	73.0	70	130				

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **LCS1UT-122209**	SampType: **LCS**	TestCode: **0.25CT-TCE-**	Units: **ppbV**	Prep Date:	RunNo: **3136**
Client ID: **ZZZZZ**	Batch ID: **R3136**	TestNo: **TO-15**		Analysis Date: **12/22/2009**	SeqNo: **39117**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.040	0.15	1	0	104	70	130				
1,1,2,2-Tetrachloroethane	1.020	0.15	1	0	102	70	130				
1,1,2-Trichloroethane	1.060	0.15	1	0	106	70	130				
1,1-Dichloroethane	0.9900	0.15	1	0	99.0	70	130				
1,1-Dichloroethene	0.7800	0.15	1	0	78.0	70	130				
1,2,4-Trichlorobenzene	0.9600	0.15	1	0	96.0	70	130				
1,2,4-Trimethylbenzene	0.9200	0.15	1	0	92.0	70	130				
1,2-Dibromoethane	1.020	0.15	1	0	102	70	130				
1,2-Dichlorobenzene	0.9600	0.15	1	0	96.0	70	130				
1,2-Dichloroethane	0.9900	0.15	1	0	99.0	70	130				
1,2-Dichloropropane	1.050	0.15	1	0	105	70	130				
1,3,5-Trimethylbenzene	0.9800	0.15	1	0	98.0	70	130				
1,3-butadiene	0.8400	0.15	1	0	84.0	70	130				
1,3-Dichlorobenzene	0.9700	0.15	1	0	97.0	70	130				
1,4-Dichlorobenzene	0.9700	0.15	1	0	97.0	70	130				
1,4-Dioxane	0.8700	0.30	1	0	87.0	70	130				
2,2,4-trimethylpentane	1.070	0.15	1	0	107	70	130				
4-ethyltoluene	0.8200	0.15	1	0	82.0	70	130				
Acetone	0.7900	0.30	1	0	79.0	70	130				
Allyl chloride	0.8300	0.15	1	0	83.0	70	130				
Benzene	1.100	0.15	1	0	110	70	130				
Benzyl chloride	0.7600	0.15	1	0	76.0	70	130				
Bromodichloromethane	1.070	0.15	1	0	107	70	130				
Bromoform	0.9400	0.15	1	0	94.0	70	130				
Bromomethane	0.7800	0.15	1	0	78.0	70	130				
Carbon disulfide	0.7700	0.15	1	0	77.0	70	130				
Carbon tetrachloride	1.000	0.040	1	0	100	70	130				
Chlorobenzene	1.000	0.15	1	0	100	70	130				
Chloroethane	0.8300	0.15	1	0	83.0	70	130				

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: LCS1UT-122209	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39117

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	1.000	0.15	1	0	100	70	130				
Chloromethane	0.8200	0.15	1	0	82.0	70	130				
cis-1,2-Dichloroethene	0.9400	0.15	1	0	94.0	70	130				
cis-1,3-Dichloropropene	1.030	0.15	1	0	103	70	130				
Cyclohexane	1.130	0.15	1	0	113	70	130				
Dibromochloromethane	0.9600	0.15	1	0	96.0	70	130				
Ethyl acetate	0.9100	0.25	1	0	91.0	70	130				
Ethylbenzene	0.9700	0.15	1	0	97.0	70	130				
Freon 11	0.8100	0.15	1	0	81.0	70	130				
Freon 113	0.8200	0.15	1	0	82.0	70	130				
Freon 114	0.7900	0.15	1	0	79.0	70	130				
Freon 12	0.9100	0.15	1	0	91.0	70	130				
Heptane	1.020	0.15	1	0	102	70	130				
Hexachloro-1,3-butadiene	1.100	0.15	1	0	110	70	130				
Hexane	1.060	0.15	1	0	106	70	130				
Isopropyl alcohol	0.7500	0.15	1	0	75.0	70	130				
m&p-Xylene	2.080	0.30	2	0	104	70	130				
Methyl Butyl Ketone	0.8500	0.30	1	0	85.0	70	130				
Methyl Ethyl Ketone	0.9900	0.30	1	0	99.0	70	130				
Methyl Isobutyl Ketone	0.8200	0.30	1	0	82.0	70	130				
Methyl tert-butyl ether	0.9100	0.15	1	0	91.0	70	130				
Methylene chloride	0.7700	0.15	1	0	77.0	70	130				
o-Xylene	0.9700	0.15	1	0	97.0	70	130				
Propylene	0.9600	0.15	1	0	96.0	70	130				
Styrene	0.9600	0.15	1	0	96.0	70	130				
Tetrachloroethylene	1.050	0.15	1	0	105	70	130				
Tetrahydrofuran	0.9400	0.15	1	0	94.0	70	130				
Toluene	1.010	0.15	1	0	101	70	130				
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130				
trans-1,3-Dichloropropene	0.9900	0.15	1	0	99.0	70	130				
Trichloroethene	1.040	0.040	1	0	104	70	130				

Page 29 of 144.

Qualifiers:

- . Results reported are not blank corrected
- J Analyte detected at or below quantitation limits
- S Spike Recovery outside accepted recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: LCS1UT-122209	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39117

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	0.9300	0.15	1	0	93.0	70	130				
Vinyl Bromide	0.8100	0.15	1	0	81.0	70	130				
Vinyl chloride	0.7400	0.040	1	0	74.0	70	130				

Sample ID: LCS1UTD-122209	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39118

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.9800	0.15	1	0	98.0	70	130	1.04	5.94	30	
1,1,2,2-Tetrachloroethane	0.8900	0.15	1	0	89.0	70	130	1.02	13.6	30	
1,1,2-Trichloroethane	0.9700	0.15	1	0	97.0	70	130	1.06	8.87	30	
1,1-Dichloroethane	0.8500	0.15	1	0	85.0	70	130	0.99	15.2	30	
1,1-Dichloroethene	0.7300	0.15	1	0	73.0	70	130	0.78	6.62	30	
1,2,4-Trichlorobenzene	0.9200	0.15	1	0	92.0	70	130	0.96	4.26	30	
1,2,4-Trimethylbenzene	0.8400	0.15	1	0	84.0	70	130	0.92	9.09	30	
1,2-Dibromoethane	0.9400	0.15	1	0	94.0	70	130	1.02	8.16	30	
1,2-Dichlorobenzene	0.9000	0.15	1	0	90.0	70	130	0.96	6.45	30	
1,2-Dichloroethane	0.8800	0.15	1	0	88.0	70	130	0.99	11.8	30	
1,2-Dichloropropane	0.9400	0.15	1	0	94.0	70	130	1.05	11.1	30	
1,3,5-Trimethylbenzene	0.8600	0.15	1	0	86.0	70	130	0.98	13.0	30	
1,3-butadiene	0.7600	0.15	1	0	76.0	70	130	0.84	10.0	30	
1,3-Dichlorobenzene	0.9100	0.15	1	0	91.0	70	130	0.97	6.38	30	
1,4-Dichlorobenzene	0.9100	0.15	1	0	91.0	70	130	0.97	6.38	30	
1,4-Dioxane	0.9900	0.30	1	0	99.0	70	130	0.87	12.9	30	
2,2,4-trimethylpentane	0.9000	0.15	1	0	90.0	70	130	1.07	17.3	30	
4-ethyltoluene	0.7500	0.15	1	0	75.0	70	130	0.82	8.92	30	
Acetone	0.8700	0.30	1	0	87.0	70	130	0.79	9.64	30	
Allyl chloride	0.9100	0.15	1	0	91.0	70	130	0.83	9.20	30	
Benzene	0.8800	0.15	1	0	88.0	70	130	1.1	22.2	30	
Benzyl chloride	0.7500	0.15	1	0	75.0	70	130	0.76	1.32	30	

Qualifiers:

- . Results reported are not blank corrected
- J Analyte detected at or below quantitation limits
- S Spike Recovery outside accepted recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **LCS1UTD-122209** SampType: **LCSD** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	0.9900	0.15	1	0	99.0	70	130	1.07	7.77	30	
Bromoform	0.8900	0.15	1	0	89.0	70	130	0.94	5.46	30	
Bromomethane	0.7200	0.15	1	0	72.0	70	130	0.78	8.00	30	
Carbon disulfide	1.110	0.15	1	0	111	70	130	0.77	36.2	30	R
Carbon tetrachloride	0.9600	0.040	1	0	96.0	70	130	1	4.08	30	
Chlorobenzene	0.9000	0.15	1	0	90.0	70	130	1	10.5	30	
Chloroethane	0.7200	0.15	1	0	72.0	70	130	0.83	14.2	30	
Chloroform	0.9100	0.15	1	0	91.0	70	130	1	9.42	30	
Chloromethane	0.7600	0.15	1	0	76.0	70	130	0.82	7.59	30	
cis-1,2-Dichloroethene	0.8300	0.15	1	0	83.0	70	130	0.94	12.4	30	
cis-1,3-Dichloropropene	0.9800	0.15	1	0	98.0	70	130	1.03	4.98	30	
Cyclohexane	0.9500	0.15	1	0	95.0	70	130	1.13	17.3	30	
Dibromochloromethane	0.8800	0.15	1	0	88.0	70	130	0.96	8.70	30	
Ethyl acetate	0.7700	0.25	1	0	77.0	70	130	0.91	16.7	30	
Ethylbenzene	0.8700	0.15	1	0	87.0	70	130	0.97	10.9	30	
Freon 11	0.7700	0.15	1	0	77.0	70	130	0.81	5.06	30	
Freon 113	1.240	0.15	1	0	124	70	130	0.82	40.8	30	R
Freon 114	0.7500	0.15	1	0	75.0	70	130	0.79	5.19	30	
Freon 12	0.9200	0.15	1	0	92.0	70	130	0.91	1.09	30	
Heptane	0.8600	0.15	1	0	86.0	70	130	1.02	17.0	30	
Hexachloro-1,3-butadiene	1.090	0.15	1	0	109	70	130	1.1	0.913	30	
Hexane	0.8600	0.15	1	0	86.0	70	130	1.06	20.8	30	
Isopropyl alcohol	0.8200	0.15	1	0	82.0	70	130	0.75	8.92	30	
m&p-Xylene	1.880	0.30	2	0	94.0	70	130	2.08	10.1	30	
Methyl Butyl Ketone	1.080	0.30	1	0	108	70	130	0.85	23.8	30	
Methyl Ethyl Ketone	0.8500	0.30	1	0	85.0	70	130	0.99	15.2	30	
Methyl Isobutyl Ketone	1.020	0.30	1	0	102	70	130	0.82	21.7	30	
Methyl tert-butyl ether	0.7400	0.15	1	0	74.0	70	130	0.91	20.6	30	
Methylene chloride	1.180	0.15	1	0	118	70	130	0.77	42.1	30	R
o-Xylene	0.8500	0.15	1	0	85.0	70	130	0.97	13.2	30	
Propylene	0.7900	0.15	1	0	79.0	70	130	0.96	19.4	30	

Qualifiers:
. Results reported are not blank corrected
E Value above quantitation range
H Holding times for preparation or analysis exceeded
J Analyte detected at or below quantitation limits
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **LCS1UTD-122209** SampType: **LCSD** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	0.8500	0.15	1	0	85.0	70	130	0.96	12.2	30	
Tetrachloroethylene	0.9800	0.15	1	0	98.0	70	130	1.05	6.90	30	
Tetrahydrofuran	0.7400	0.15	1	0	74.0	70	130	0.94	23.8	30	
Toluene	0.8800	0.15	1	0	88.0	70	130	1.01	13.8	30	
trans-1,2-Dichloroethene	0.7800	0.15	1	0	78.0	70	130	0.98	22.7	30	
trans-1,3-Dichloropropene	0.8800	0.15	1	0	88.0	70	130	0.99	11.8	30	
Trichloroethene	0.9600	0.040	1	0	96.0	70	130	1.04	8.00	30	
Vinyl acetate	0.7100	0.15	1	0	71.0	70	130	0.93	26.8	30	
Vinyl Bromide	0.7400	0.15	1	0	74.0	70	130	0.81	9.03	30	
Vinyl chloride	0.7300	0.040	1	0	73.0	70	130	0.74	1.36	30	

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

Compound	Amount	IDL # 1	IDL # 2	IDL # 3	IDL # 4	IDL # 5	IDL # 6	IDL # 7	Avg	Stdev	%Rec	IDL
Propylene	0.30	0.34	0.31	0.34	0.32	0.34	0.37	0.33	0.34	0.019	111.9	0.060
Freon 12	0.30	0.32	0.32	0.32	0.34	0.32	0.33	0.33	0.33	0.008	108.6	0.025
Chloromethane	0.30	0.36	0.34	0.35	0.37	0.36	0.36	0.37	0.36	0.011	119.5	0.034
Freon 114	0.30	0.33	0.36	0.35	0.35	0.35	0.36	0.36	0.35	0.011	117.1	0.034
Vinyl Chloride	0.30	0.3	0.3	0.31	0.31	0.32	0.32	0.33	0.31	0.011	104.3	0.035
1,3-butadiene	0.30	0.37	0.39	0.35	0.39	0.37	0.37	0.39	0.38	0.015	125.2	0.048
Bromomethane	0.30	0.35	0.35	0.37	0.36	0.36	0.37	0.38	0.36	0.011	121.0	0.035
Chloroethane	0.30	0.36	0.36	0.35	0.36	0.37	0.34	0.37	0.36	0.011	119.5	0.034
Vinyl Bromide	0.30	0.36	0.37	0.38	0.36	0.38	0.36	0.38	0.37	0.010	123.3	0.031
Freon 11	0.30	0.35	0.37	0.36	0.36	0.36	0.35	0.37	0.36	0.008	120.0	0.026
Acetone	0.30	0.38	0.38	0.36	0.38	0.39	0.38	0.41	0.38	0.015	127.6	0.047
Isopropyl alcohol	0.30	0.29	0.28	0.28	0.27	0.26	0.26	0.27	0.27	0.011	91.0	0.035
1,1-dichloroethene	0.30	0.31	0.34	0.34	0.37	0.35	0.34	0.37	0.35	0.021	115.2	0.065
Freon 113	0.30	0.35	0.36	0.37	0.38	0.36	0.35	0.36	0.36	0.011	120.5	0.034
Methylene chloride	0.30	0.35	0.37	0.36	0.36	0.33	0.35	0.38	0.36	0.016	119.0	0.050
Allyl chloride	0.30	0.39	0.34	0.4	0.37	0.37	0.35	0.4	0.37	0.024	124.8	0.075
Carbon disulfide	0.30	0.38	0.38	0.39	0.39	0.38	0.38	0.4	0.39	0.008	128.6	0.025
trans-1,2-dichloroethene	0.30	0.35	0.36	0.36	0.34	0.36	0.35	0.36	0.35	0.008	118.1	0.025
methyl tert-butyl ether	0.30	0.37	0.34	0.36	0.36	0.35	0.35	0.35	0.35	0.010	118.1	0.031
1,1-dichloroethane	0.30	0.36	0.34	0.35	0.31	0.35	0.38	0.36	0.35	0.022	116.7	0.068
Vinyl acetate	0.30	0.3	0.29	0.28	0.38	0.31	0.33	0.32	0.32	0.033	105.2	0.104
Methyl Ethyl Ketone	0.30	0.28	0.28	0.3	0.27	0.26	0.3	0.27	0.28	0.015	93.3	0.048
cis-1,2-dichloroethene	0.30	0.29	0.3	0.29	0.31	0.3	0.3	0.3	0.30	0.007	99.5	0.022
Hexane	0.30	0.29	0.28	0.29	0.33	0.29	0.29	0.28	0.29	0.017	97.6	0.054
Ethyl acetate	0.30	0.28	0.27	0.28	0.25	0.25	0.31	0.26	0.27	0.021	90.5	0.066
Chloroform	0.30	0.32	0.33	0.34	0.33	0.32	0.33	0.33	0.33	0.007	109.5	0.022
Tetrahydrofuran	0.30	0.34	0.31	0.32	0.29	0.25	0.28	0.32	0.30	0.030	100.5	0.095
1,2-dichloroethane	0.30	0.31	0.31	0.32	0.33	0.31	0.32	0.32	0.32	0.008	105.7	0.024
1,1,1-trichloroethane	0.30	0.34	0.33	0.36	0.33	0.34	0.32	0.35	0.34	0.013	112.9	0.042
Cyclohexane	0.30	0.28	0.3	0.29	0.32	0.3	0.23	0.3	0.29	0.029	96.2	0.090
Carbon tetrachloride	0.30	0.32	0.31	0.33	0.32	0.32	0.3	0.33	0.32	0.011	106.2	0.034
Benzene	0.30	0.29	0.28	0.3	0.29	0.28	0.29	0.3	0.29	0.008	96.7	0.026
1,4-dioxane	0.30	0.27	0.27	0.27	0.27	0.3	0.3	0.3	0.28	0.016	94.3	0.050
2,2,4-trimethylpentane	0.30	0.31	0.31	0.31	0.31	0.32	0.29	0.33	0.31	0.012	103.8	0.038

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Compound	Amount	IDL # 1	IDL # 2	IDL # 3	IDL # 4	IDL # 5	IDL # 6	IDL # 7	Avg	Stdev	%Rec	IDL
Heptane	0.30	0.32	0.3	0.33	0.28	0.3	0.3	0.37	0.31	0.029	104.8	0.092
Trichloroethene	0.30	0.28	0.28	0.29	0.28	0.28	0.28	0.29	0.28	0.005	94.3	0.015
1,2-dichloropropane	0.30	0.31	0.3	0.33	0.31	0.31	0.29	0.31	0.31	0.012	102.9	0.038
Bromodichloromethane	0.30	0.36	0.36	0.38	0.37	0.36	0.35	0.37	0.36	0.010	121.4	0.031
cis-1,3-dichloropropene	0.30	0.27	0.29	0.28	0.26	0.26	0.27	0.28	0.27	0.011	91.0	0.035
trans-1,3-dichloropropen	0.30	0.32	0.29	0.31	0.32	0.32	0.29	0.31	0.31	0.013	102.9	0.042
1,1,2-trichloroethane	0.30	0.32	0.31	0.34	0.32	0.32	0.31	0.33	0.32	0.011	107.1	0.034
Toluene	0.30	0.29	0.31	0.29	0.28	0.28	0.29	0.28	0.29	0.011	96.2	0.034
Methyl Isobutyl Ketone	0.30	0.35	0.3	0.27	0.28	0.33	0.27	0.27	0.30	0.033	98.6	0.102
Dibromochloromethane	0.30	0.39	0.41	0.41	0.4	0.41	0.39	0.43	0.41	0.014	135.2	0.044
Methyl Butyl Ketone	0.30	0.3	0.26	0.28	0.26	0.27	0.3	0.27	0.28	0.017	92.4	0.054
1,2-dibromoethane	0.30	0.3	0.34	0.34	0.33	0.33	0.31	0.34	0.33	0.016	109.0	0.050
Tetrachloroethylene	0.30	0.33	0.36	0.35	0.33	0.34	0.32	0.34	0.34	0.013	112.9	0.042
Chlorobenzene	0.30	0.31	0.34	0.32	0.33	0.32	0.32	0.33	0.32	0.010	108.1	0.031
Ethylbenzene	0.30	0.28	0.31	0.3	0.29	0.3	0.29	0.29	0.29	0.010	98.1	0.031
m&p-xylene	0.60	0.48	0.54	0.52	0.51	0.5	0.51	0.52	0.51	0.019	85.2	0.059
Styrene	0.30	0.3	0.31	0.3	0.3	0.29	0.29	0.3	0.30	0.007	99.5	0.022
Bromoform	0.30	0.42	0.43	0.42	0.41	0.42	0.4	0.43	0.42	0.011	139.5	0.034
o-xylene	0.30	0.29	0.31	0.24	0.31	0.31	0.29	0.3	0.29	0.025	97.6	0.079
Bromofluorobenzene	1.00	0.86	0.89	0.85	0.87	0.82	0.87	0.85	0.86	0.022	85.9	0.069
1,1,2,2-tetrachloroethane	0.30	0.33	0.33	0.34	0.33	0.34	0.32	0.33	0.33	0.007	110.5	0.022
4-ethyltoluene	0.30	0.34	0.37	0.36	0.35	0.35	0.35	0.35	0.35	0.010	117.6	0.030
1,3,5-trimethylbenzene	0.30	0.25	0.26	0.26	0.26	0.26	0.25	0.24	0.25	0.008	84.8	0.025
1,2,4-trimethylbenzene	0.30	0.27	0.28	0.28	0.28	0.26	0.28	0.28	0.28	0.008	91.9	0.025
1,3-dichlorobenzene	0.30	0.27	0.28	0.29	0.26	0.27	0.26	0.27	0.27	0.011	90.5	0.034
benzyl chloride	0.30	0.31	0.32	0.33	0.32	0.31	0.33	0.34	0.32	0.011	107.6	0.035
1,4-dichlorobenzene	0.30	0.25	0.26	0.26	0.25	0.25	0.24	0.26	0.25	0.008	84.3	0.024
1,2-dichlorobenzene	0.30	0.25	0.26	0.27	0.26	0.25	0.26	0.28	0.26	0.011	87.1	0.034
1,2,4-trichlorobenzene	0.30	0.26	0.29	0.28	0.26	0.28	0.26	0.27	0.27	0.012	90.5	0.038
Naphthalene	0.30	0.22	0.23	0.23	0.23	0.21	0.22	0.22	0.22	0.008	74.3	0.024
Hexachloro-1,3-butadien	0.30	0.29	0.3	0.3	0.28	0.3	0.29	0.3	0.29	0.008	98.1	0.025

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Compound	Amount	IDL #1	IDL #2	IDL #3	IDL #4	IDL #5	IDL #6	IDL #7	Avg	Stdev	%Rec	IDL
Vinyl Chloride	0.10	0.12	0.11	0.12	0.11	0.11	0.12	0.12	0.12	0.005	115.7	0.017
1,1-dichloroethene	0.10	0.12	0.12	0.13	0.13	0.13	0.12	0.12	0.12	0.005	124.3	0.017
Methylene chloride	0.10	0.11	0.13	0.13	0.11	0.12	0.12	0.12	0.12	0.008	120.0	0.026
trans-1,2-dichloroethene	0.10	0.11	0.13	0.11	0.1	0.11	0.11	0.09	0.11	0.012	108.6	0.038
1,1-dichloroethane	0.10	0.11	0.13	0.11	0.12	0.11	0.12	0.12	0.12	0.008	117.1	0.024
cis-1,2-dichloroethene	0.10	0.09	0.11	0.11	0.09	0.09	0.09	0.1	0.10	0.010	97.1	0.030
1,2-dichloroethane	0.10	0.1	0.11	0.12	0.11	0.1	0.11	0.11	0.11	0.007	108.6	0.022
1,1,1-trichloroethane	0.10	0.11	0.11	0.11	0.12	0.11	0.09	0.1	0.11	0.010	107.1	0.030
Carbon tetrachloride	0.10	0.11	0.1	0.1	0.11	0.09	0.1	0.1	0.10	0.007	101.4	0.022
Benzene	0.10	0.09	0.11	0.09	0.09	0.1	0.09	0.09	0.09	0.008	94.3	0.025
Trichloroethene	0.10	0.09	0.09	0.09	0.1	0.1	0.09	0.1	0.09	0.005	94.3	0.017
1,1,2-trichloroethane	0.10	0.11	0.09	0.09	0.11	0.09	0.11	0.1	0.10	0.010	100.0	0.031
Tetrachloroethylene	0.10	0.12	0.12	0.13	0.12	0.11	0.11	0.11	0.12	0.008	117.1	0.024
Bromofluorobenzene	1.00	0.79	0.84	0.82	0.82	0.82	0.82	0.81	0.82	0.015	81.7	0.047

GC/MS-Whole Air Calculations

Relative Response Factor (RRF)

$$RRF = \frac{Ax * Cis}{Ais * Cx}$$

where: Ax = area of the characteristic ion for the compound being measured
Ais = area of the characteristic ion for the specific internal standard of the compound being measured
Cx = concentration of the compound being measured (ppbv)
Cis = concentration of the internal standard (ppbv)

Percent Relative Standard Deviation (%RSD)

$$\% RSD = \frac{\text{Standard deviation of RRF values} * 100}{\text{mean RRF}}$$

Percent Difference (%D)

$$\% D = \frac{(RRFc - \text{mean } RRFi) * 100}{\text{mean } RRFi}$$

where: RRFc = relative response factor from the continuing calibration
mean RRFi = mean relative response factor from the initial calibration

Sample Calculations

$$ppbv = \frac{Ax * Is * Df}{Ais * RRF}$$

where: Ax = area of the characteristic ion for the compound being measured
Ais = area of the characteristic ion for the specific internal standard of the compound being measured
Is = Concentration of the internal standard injected (ppbv)
RRF= relative response factor for the compound being measured
Df = Dilution factor

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

SAMPLE DATA

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-7			"Hg		12/21/2009
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/22/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/22/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/22/2009
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/22/2009
Acetone	2.5	0.30		ppbV	1	12/22/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Benzene	0.19	0.15		ppbV	1	12/22/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Bromoform	< 0.15	0.15		ppbV	1	12/22/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/22/2009
Carbon disulfide	< 0.15	0.15		ppbV	1	12/22/2009
Carbon tetrachloride	0.070	0.040		ppbV	1	12/22/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/22/2009
Chloroform	< 0.15	0.15		ppbV	1	12/22/2009
Chloromethane	0.27	0.15		ppbV	1	12/22/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/22/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/22/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 11	0.16	0.15		ppbV	1	12/22/2009
Freon 113	< 0.15	0.15		ppbV	1	12/22/2009
Freon 114	< 0.15	0.15		ppbV	1	12/22/2009
Freon 12	0.37	0.15		ppbV	1	12/22/2009
Heptane	< 0.15	0.15		ppbV	1	12/22/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
Hexane	< 0.15	0.15		ppbV	1	12/22/2009
Isopropyl alcohol	0.28	0.15		ppbV	1	12/22/2009
m&p-Xylene	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/22/2009
Methylene chloride	< 0.15	0.15		ppbV	1	12/22/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/22/2009
Propylene	< 0.15	0.15		ppbV	1	12/22/2009
Styrene	< 0.15	0.15		ppbV	1	12/22/2009
Tetrachloroethylene	< 0.15	0.15		ppbV	1	12/22/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/22/2009
Toluene	0.18	0.15		ppbV	1	12/22/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Trichloroethene	< 0.040	0.040		ppbV	1	12/22/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl chloride	< 0.040	0.040		ppbV	1	12/22/2009
Surr: Bromofluorobenzene	71.0	70-130		%REC	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/22/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/22/2009
1,2,4-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/22/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/22/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/22/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/22/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/22/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/22/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/22/2009
4-ethyltoluene	< 0.75	0.75		ug/m3	1	12/22/2009
Acetone	6.0	0.72		ug/m3	1	12/22/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/22/2009
Benzene	0.62	0.49		ug/m3	1	12/22/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/22/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/22/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/22/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/22/2009
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/22/2009
Carbon tetrachloride	0.45	0.26		ug/m3	1	12/22/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/22/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/22/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/22/2009
Chloromethane	0.57	0.31		ug/m3	1	12/22/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/22/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/22/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/22/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/22/2009
Freon 11	0.91	0.86		ug/m3	1	12/22/2009
Freon 113	< 1.2	1.2		ug/m3	1	12/22/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	1.9	0.75		ug/m3	1	12/22/2009
Heptane	< 0.62	0.62		ug/m3	1	12/22/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/22/2009
Hexane	< 0.54	0.54		ug/m3	1	12/22/2009
Isopropyl alcohol	0.70	0.37		ug/m3	1	12/22/2009
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/22/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/22/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/22/2009
Methylene chloride	< 0.53	0.53		ug/m3	1	12/22/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/22/2009
Propylene	< 0.26	0.26		ug/m3	1	12/22/2009
Styrene	< 0.65	0.65		ug/m3	1	12/22/2009
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/22/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/22/2009
Toluene	0.69	0.57		ug/m3	1	12/22/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Trichloroethene	< 0.22	0.22		ug/m3	1	12/22/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/22/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/22/2009
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122206.D Vial: 21
Acq On : 22 Dec 2009 11:23 Operator: RJP
Sample : C0912043-001A Inst : MSD #1
Misc : C0912043-001A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 11:44:46 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

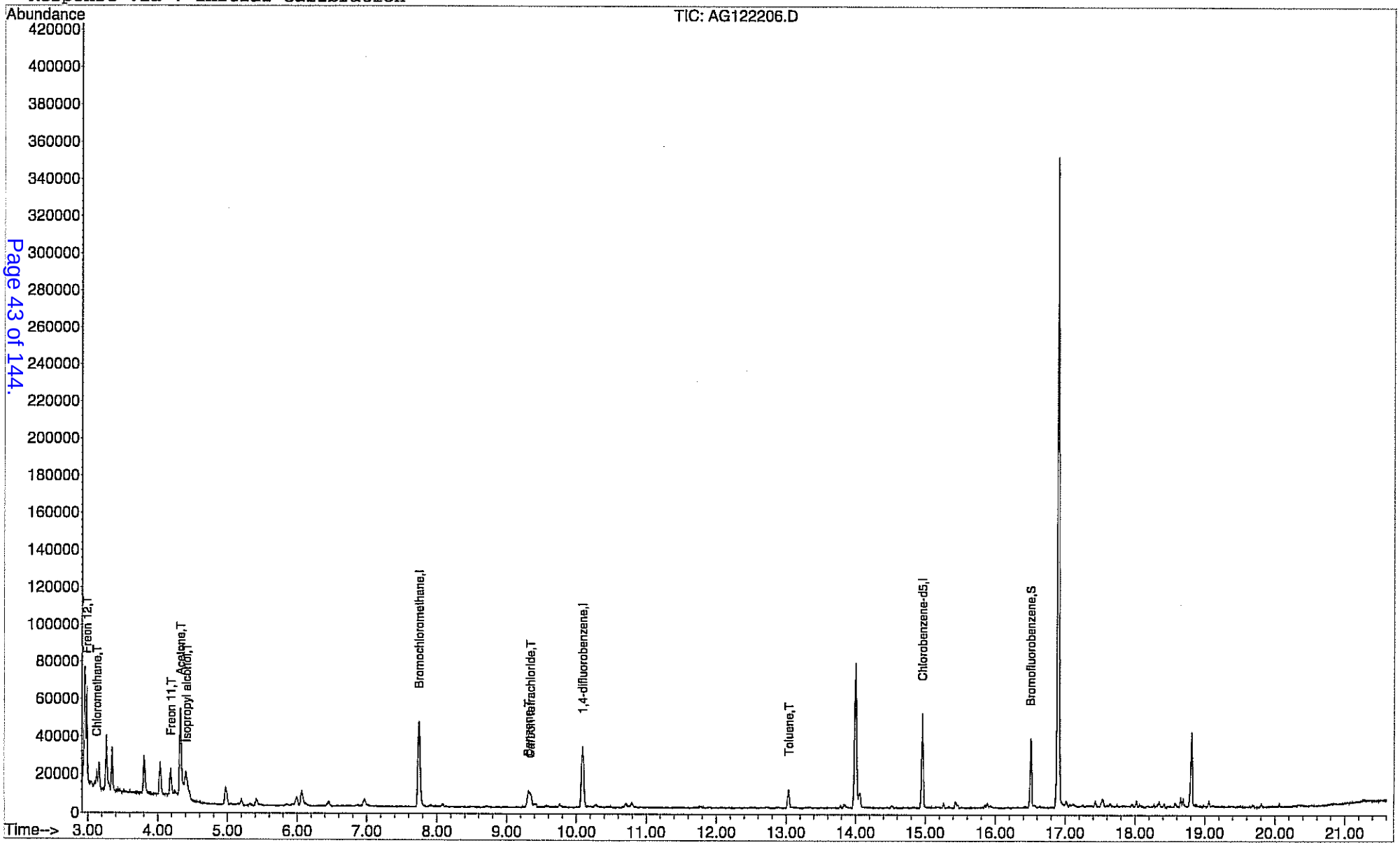
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.75	128	16469	1.00	ppb		-0.02
30) 1,4-difluorobenzene	10.09	114	32827	1.00	ppb		-0.01
44) Chlorobenzene-d5	14.95	117	28104	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	9252	0.71	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 71.00%				
Target Compounds							Qvalue
3) Freon 12	2.99	85	31004	0.37	ppb		99
4) Chloromethane	3.13	50	4954	0.27	ppb		89
11) Freon 11	4.19	101	9515	0.16	ppb		99
12) Acetone	4.33	58	14081m	2.47	ppb		
13) Isopropyl alcohol	4.43	45	4405	0.28	ppb	#	100
33) Carbon tetrachloride	9.34	117	5128	0.07	ppb		94
34) Benzene	9.31	78	7319	0.19	ppb		92
45) Toluene	13.03	92	3876	0.18	ppb		98

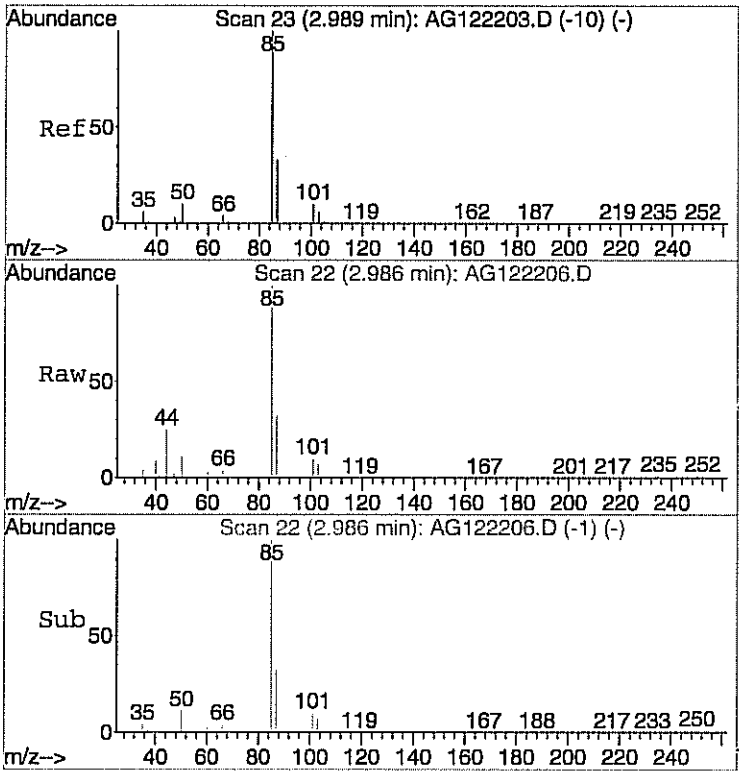
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122206.D Vial: 21
Acq On : 22 Dec 2009 11:23 Operator: RJP
Sample : C0912043-001A Inst : MSD #1
Misc : C0912043-001A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 24 8:44 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Initial Calibration

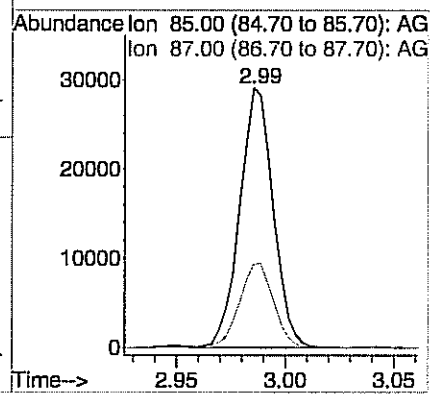


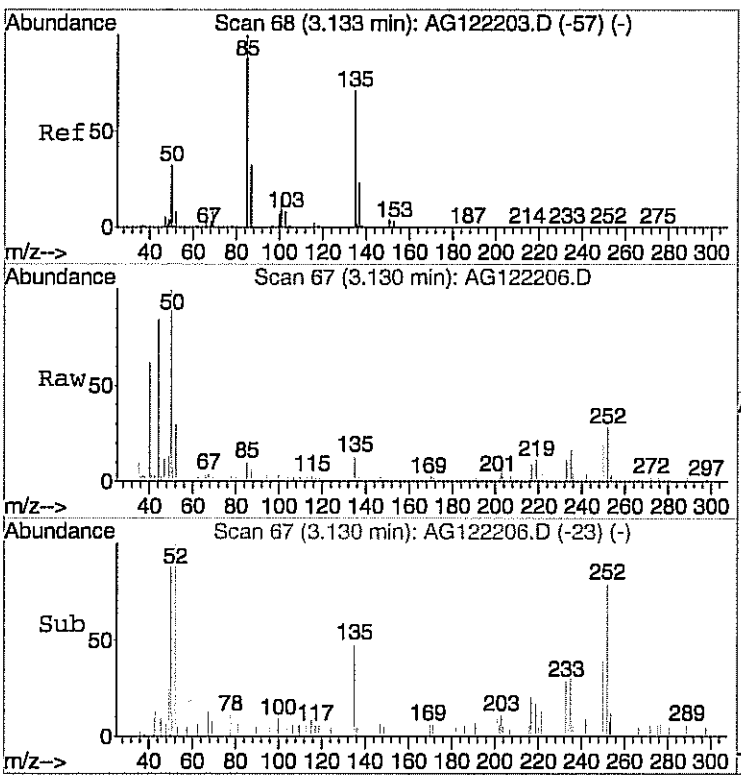


#3
Freon 12
Concen: 0.37 ppb
RT: 2.99 min Scan# 22
Delta R.T. -0.01 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion: 85 Resp: 31004

Ion	Ratio	Lower	Upper
85	100		
87	33.0	13.6	53.6

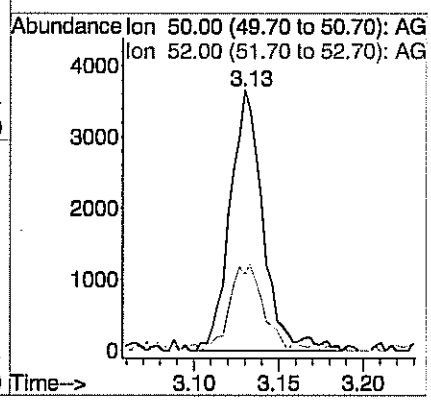


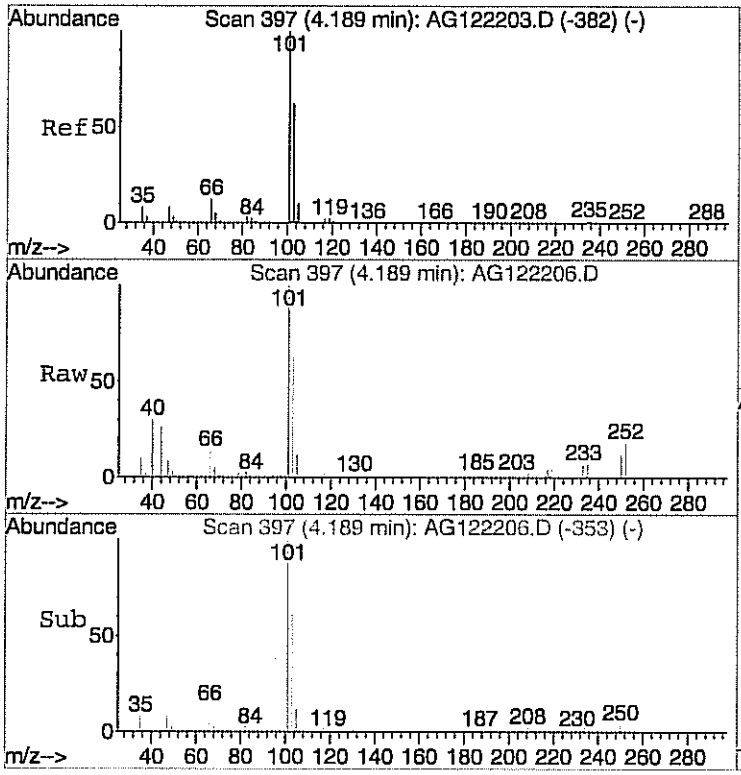


#4
Chloromethane
Concen: 0.27 ppb
RT: 3.13 min Scan# 67
Delta R.T. -0.01 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion: 50 Resp: 4954

Ion	Ratio	Lower	Upper
50	100		
52	32.9	7.3	47.3

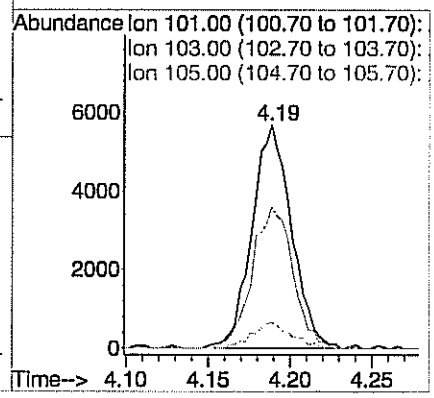


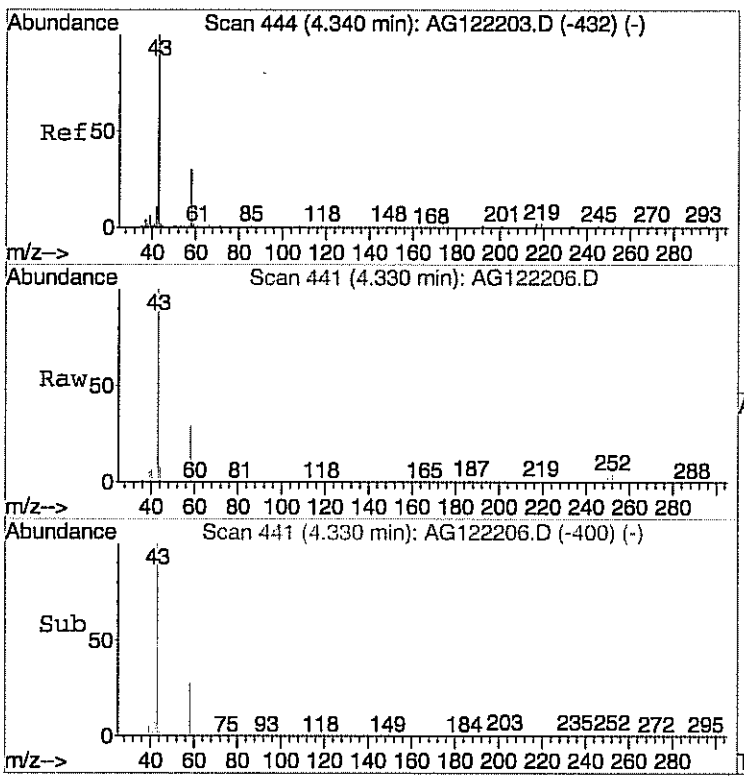


#11
Freon 11
Concen: 0.16 ppb
RT: 4.19 min Scan# 397
Delta R.T. -0.01 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion:101 Resp: 9515

Ion	Ratio	Lower	Upper
101	100		
103	65.1	44.1	84.1
105	11.6	0.0	31.1

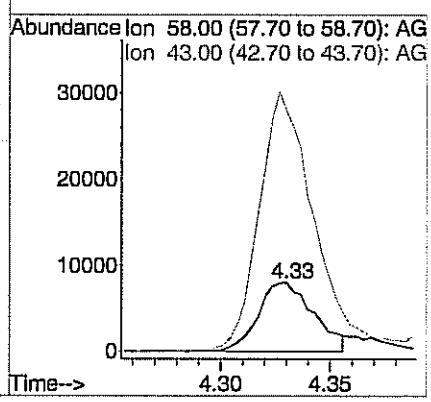


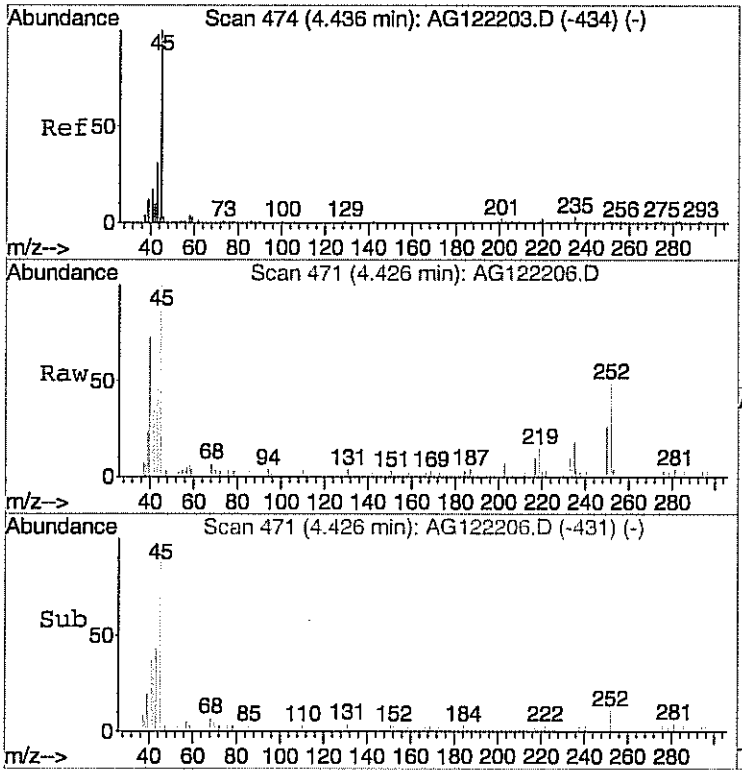


#12
Acetone
Concen: 2.47 ppb m
RT: 4.33 min Scan# 441
Delta R.T. -0.02 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion: 58 Resp: 14081

Ion	Ratio	Lower	Upper
58	100		
43	438.0	398.6	458.6

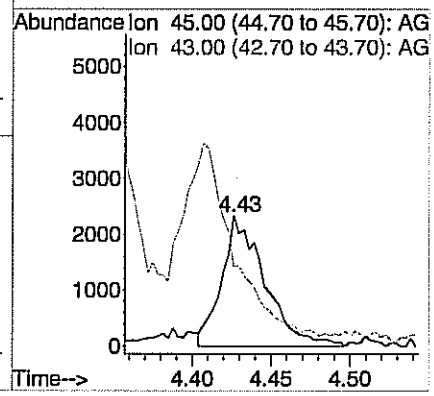


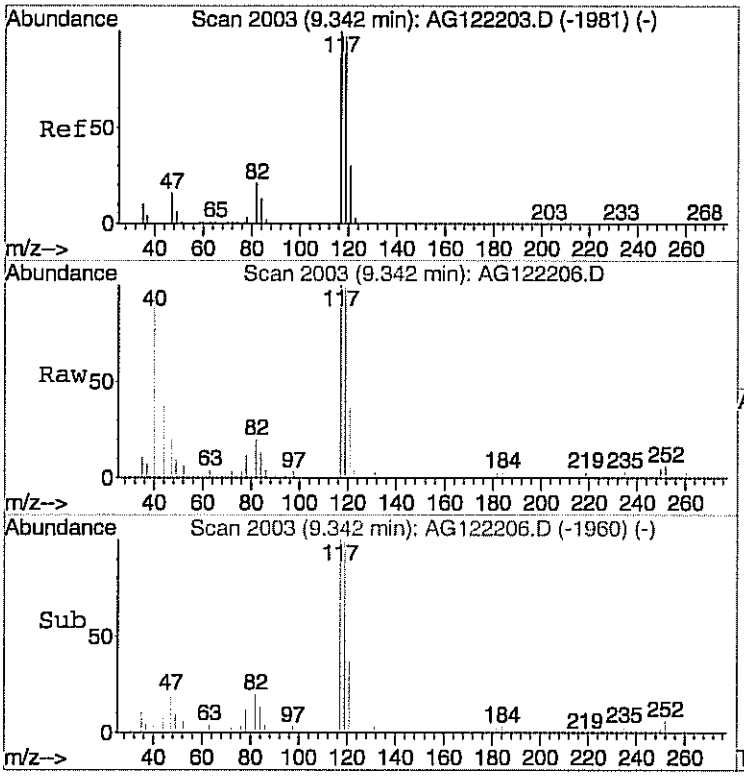


#13
Isopropyl alcohol
Concen: 0.28 ppb
RT: 4.43 min Scan# 471
Delta R.T. -0.02 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion: 45 Resp: 4405

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	20.0

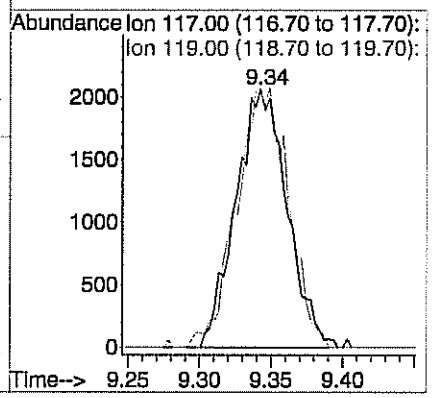


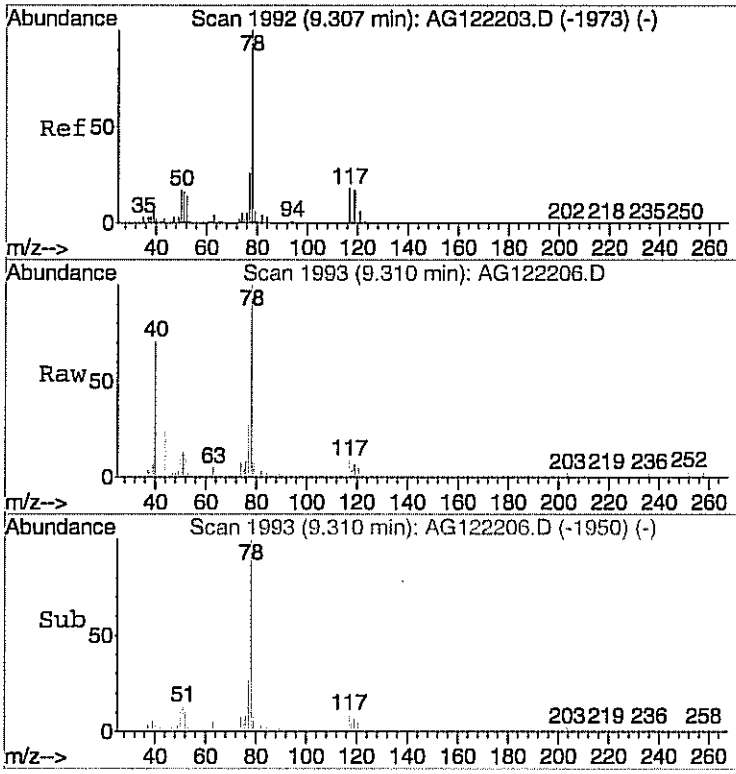


#33
Carbon tetrachloride
Concen: 0.07 ppb
RT: 9.34 min Scan# 2003
Delta R.T. -0.01 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion:117 Resp: 5128

Ion	Ratio	Lower	Upper
117	100		
119	102.2	76.6	116.6

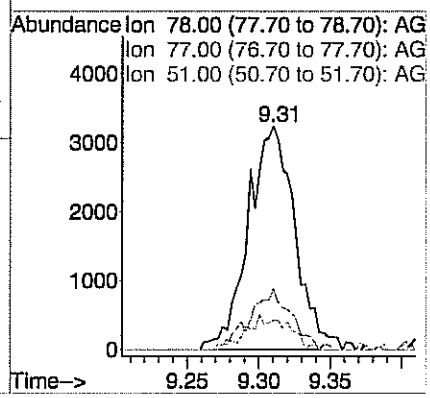


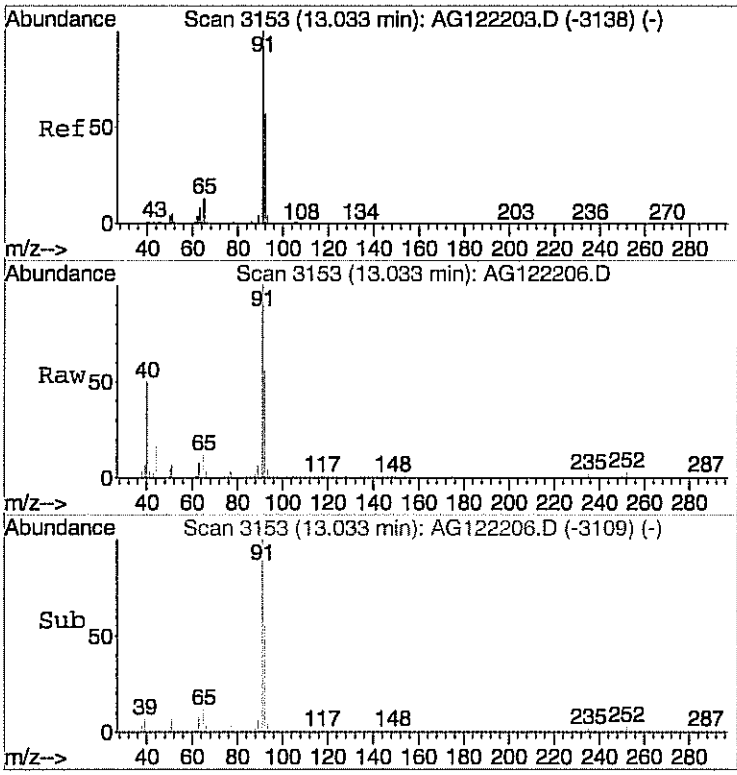


#34
Benzene
Concen: 0.19 ppb
RT: 9.31 min Scan# 1993
Delta R.T. -0.01 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion: 78 Resp: 7319

Ion	Ratio	Lower	Upper
78	100		
77	23.7	9.2	49.2
51	14.1	0.0	35.4

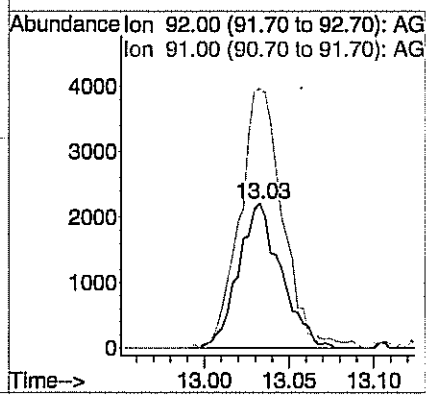




#45
Toluene
Concen: 0.18 ppb
RT: 13.03 min Scan# 3153
Delta R.T. -0.01 min
Lab File: AG122206.D
Acq: 22 Dec 2009 11:23

Tgt Ion: 92 Resp: 3876

Ion	Ratio	Lower	Upper
92	100		
91	181.0	157.6	197.6



Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-5			"Hg		12/21/2009
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.61	0.15		ppbV	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2,4-Trimethylbenzene	2.6	0.15		ppbV	1	12/22/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/22/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/22/2009
1,3,5-Trimethylbenzene	0.42	0.15		ppbV	1	12/22/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
1,3-Dichlorobenzene	0.39	0.15		ppbV	1	12/22/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/22/2009
2,2,4-trimethylpentane	0.35	0.15		ppbV	1	12/22/2009
4-ethyltoluene	0.74	0.15		ppbV	1	12/22/2009
Acetone	1.6	0.30		ppbV	1	12/22/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Benzene	1.4	0.15		ppbV	1	12/22/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Bromoform	< 0.15	0.15		ppbV	1	12/22/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/22/2009
Carbon disulfide	0.49	0.15		ppbV	1	12/22/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/22/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/22/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/22/2009
Chloroform	1.7	0.15		ppbV	1	12/22/2009
Chloromethane	0.13	0.15	J	ppbV	1	12/22/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Cyclohexane	1.2	0.15		ppbV	1	12/22/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/22/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/22/2009
Ethylbenzene	1.4	0.15		ppbV	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.11	0.15	J	ppbV	1	12/22/2009
Freon 113	0.16	0.15		ppbV	1	12/22/2009
Freon 114	< 0.15	0.15		ppbV	1	12/22/2009
Freon 12	0.34	0.15		ppbV	1	12/22/2009
Heptane	0.90	0.15		ppbV	1	12/22/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/22/2009
Hexane	1.7	0.15		ppbV	1	12/22/2009
Isopropyl alcohol	4.2	3.0		ppbV	20	12/22/2009
m&p-Xylene	2.8	6.0	J	ppbV	20	12/22/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/22/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/22/2009
Methylene chloride	< 0.15	0.15		ppbV	1	12/22/2009
o-Xylene	1.7	0.15		ppbV	1	12/22/2009
Propylene	< 0.15	0.15		ppbV	1	12/22/2009
Styrene	< 0.15	0.15		ppbV	1	12/22/2009
Tetrachloroethylene	0.45	0.15		ppbV	1	12/22/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/22/2009
Toluene	5.6	3.0		ppbV	20	12/22/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/22/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/22/2009
Trichloroethene	0.55	0.15		ppbV	1	12/22/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/22/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/22/2009
Surr: Bromofluorobenzene	111	70-130		%REC	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	3.4	0.83		ug/m3	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/22/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/22/2009
1,2,4-Trimethylbenzene	13	0.75		ug/m3	1	12/22/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/22/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/22/2009
1,3,5-Trimethylbenzene	2.1	0.75		ug/m3	1	12/22/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/22/2009
1,3-Dichlorobenzene	2.4	0.92		ug/m3	1	12/22/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/22/2009
2,2,4-trimethylpentane	1.7	0.71		ug/m3	1	12/22/2009
4-ethyltoluene	3.7	0.75		ug/m3	1	12/22/2009
Acetone	3.9	0.72		ug/m3	1	12/22/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/22/2009
Benzene	4.7	0.49		ug/m3	1	12/22/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/22/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/22/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/22/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/22/2009
Carbon disulfide	1.6	0.47		ug/m3	1	12/22/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/22/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/22/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/22/2009
Chloroform	8.5	0.74		ug/m3	1	12/22/2009
Chloromethane	0.27	0.31	J	ug/m3	1	12/22/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Cyclohexane	4.3	0.52		ug/m3	1	12/22/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/22/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/22/2009
Ethylbenzene	6.0	0.66		ug/m3	1	12/22/2009
Freon 11	0.63	0.86	J	ug/m3	1	12/22/2009
Freon 113	1.2	1.2		ug/m3	1	12/22/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	1.7	0.75		ug/m3	1	12/22/2009
Heptane	3.7	0.62		ug/m3	1	12/22/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/22/2009
Hexane	6.1	0.54		ug/m3	1	12/22/2009
Isopropyl alcohol	10	7.5		ug/m3	20	12/22/2009
m&p-Xylene	12	26	J	ug/m3	20	12/22/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/22/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/22/2009
Methylene chloride	< 0.53	0.53		ug/m3	1	12/22/2009
o-Xylene	7.4	0.66		ug/m3	1	12/22/2009
Propylene	< 0.26	0.26		ug/m3	1	12/22/2009
Styrene	< 0.65	0.65		ug/m3	1	12/22/2009
Tetrachloroethylene	3.1	1.0		ug/m3	1	12/22/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/22/2009
Toluene	21	11		ug/m3	20	12/22/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Trichloroethene	3.0	0.82		ug/m3	1	12/22/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/22/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/22/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122217.D Vial: 3
Acq On : 22 Dec 2009 17:32 Operator: RJP
Sample : C0912043-002A Inst : MSD #1
Misc : C0912043-002A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 17:54:41 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

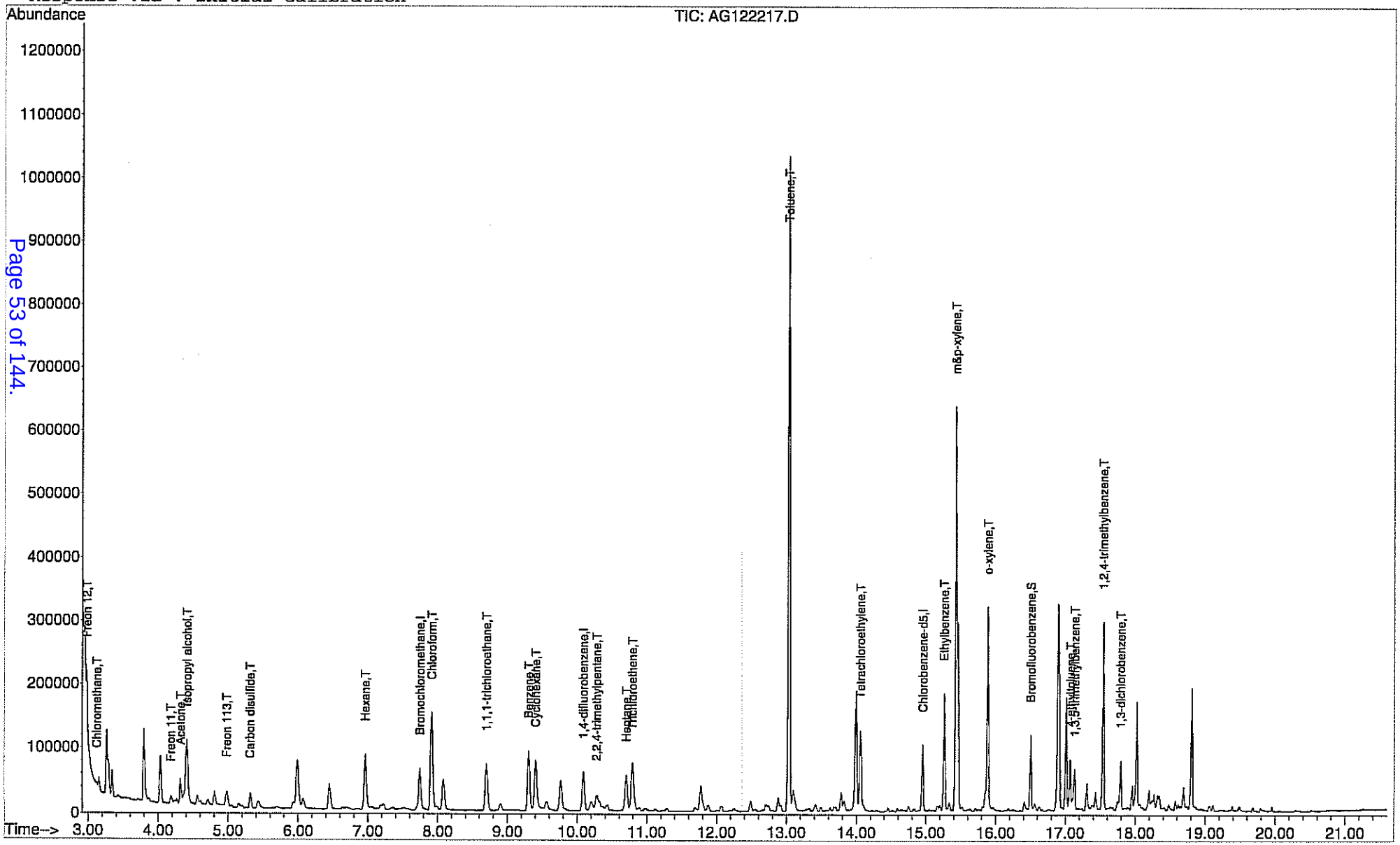
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.75	128	21683	1.00	ppb		-0.01
30) 1,4-difluorobenzene	10.09	114	57605	1.00	ppb		-0.01
44) Chlorobenzene-d5	14.95	117	56870	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	29076	1.11	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 111.00%				
Target Compounds							Qvalue
3) Freon 12	2.99	85	38259	0.34	ppb		99
4) Chloromethane	3.13	50	3226	0.13	ppb		72
11) Freon 11	4.19	101	8690	0.11	ppb		98
12) Acetone	4.33	58	12245m	1.63	ppb		
13) Isopropyl alcohol	4.42	45	58565	2.87	ppb	#	100
15) Freon 113	4.98	101	8812	0.16	ppb		97
18) Carbon disulfide	5.32	76	33848	0.49	ppb		99
25) Hexane	6.96	41	30727	1.70	ppb	#	56
27) Chloroform	7.92	83	129664	1.71	ppb		100
31) 1,1,1-trichloroethane	8.70	97	54984	0.61	ppb		99
32) Cyclohexane	9.42	56	23412m	1.22	ppb		
34) Benzene	9.30	78	99170	1.44	ppb		92
36) 2,2,4-trimethylpentane	10.29	57	20093	0.35	ppb	#	32
37) Heptane	10.71	43	16153	0.90	ppb		95
38) Trichloroethene	10.79	130	28196	0.55	ppb		99
45) Toluene	13.03	92	423525	9.71	ppb		95
50) Tetrachloroethylene	14.06	164	27879	0.45	ppb		99
52) Ethylbenzene	15.26	91	106921	1.35	ppb		97
53) m&p-xylene	15.42	91	445938	6.07	ppb		98
56) o-xylene	15.88	91	153240	1.68	ppb		98
59) 4-ethyltoluene	17.06	105	37701	0.74	ppb		98
60) 1,3,5-trimethylbenzene	17.13	105	28033	0.42	ppb		98
61) 1,2,4-trimethylbenzene	17.53	105	126178	2.57	ppb		100
62) 1,3-dichlorobenzene	17.79	146	28793	0.39	ppb		100

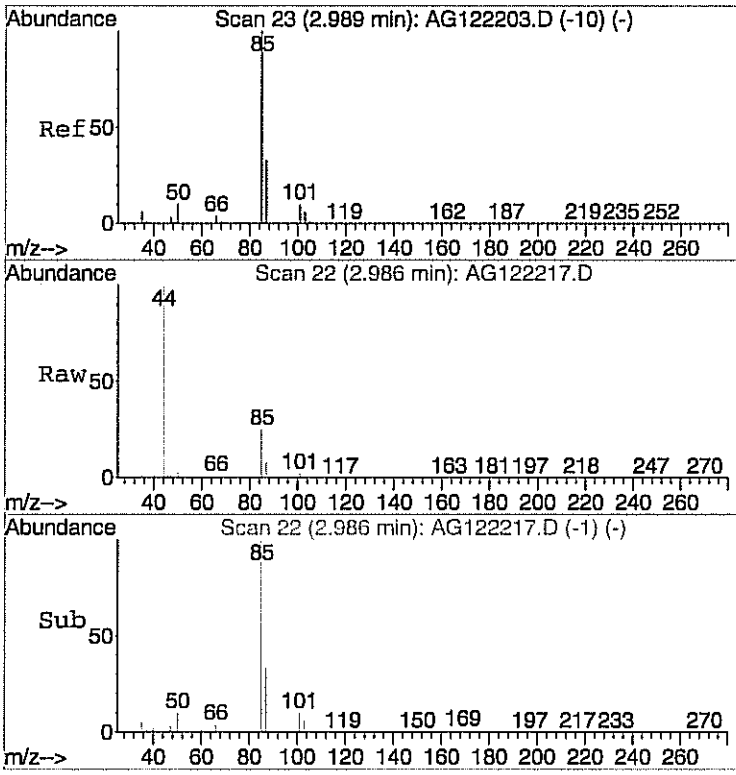
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122217.D Vial: 3
Acq On : 22 Dec 2009 17:32 Operator: RJP
Sample : C0912043-002A Inst : MSD #1
Misc : C0912043-002A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 24 8:43 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Initial Calibration

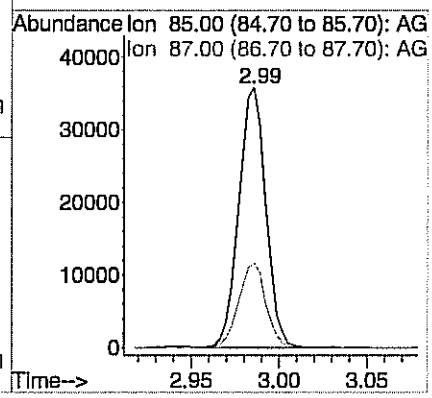


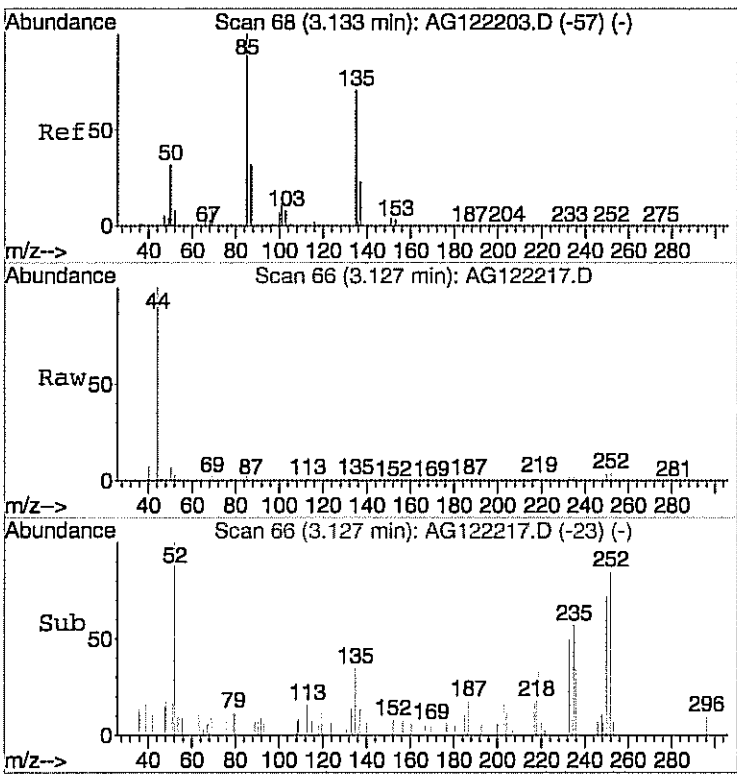


#3
Freon 12
Concen: 0.34 ppb
RT: 2.99 min Scan# 22
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 85 Resp: 38259

Ion	Ratio	Lower	Upper
85	100		
87	32.8	13.6	53.6

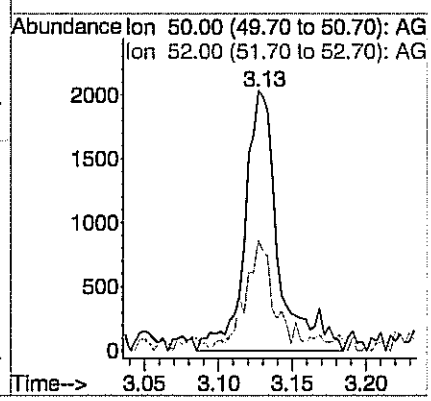


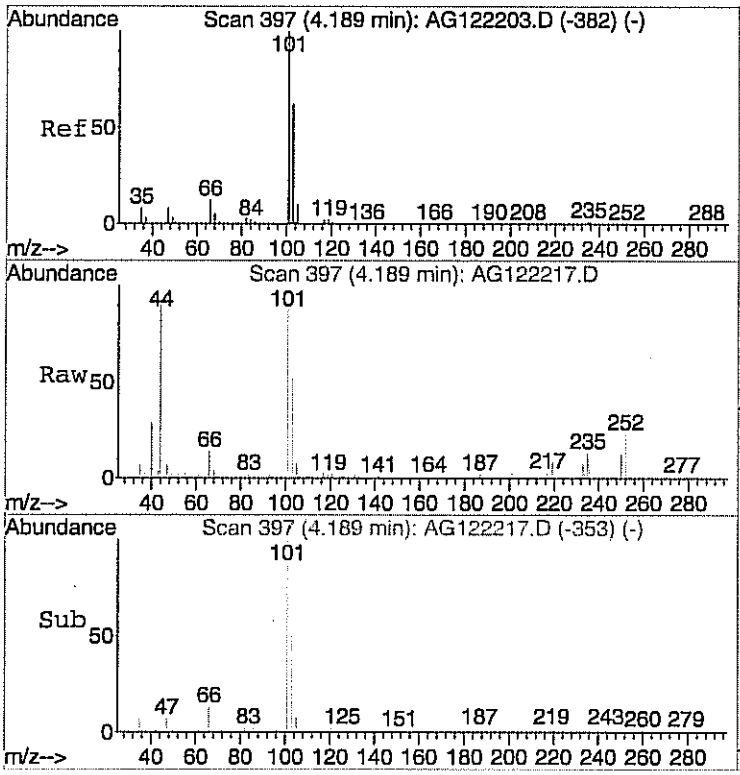


#4
Chloromethane
Concen: 0.13 ppb
RT: 3.13 min Scan# 66
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 50 Resp: 3226

Ion	Ratio	Lower	Upper
50	100		
52	42.1	7.3	47.3

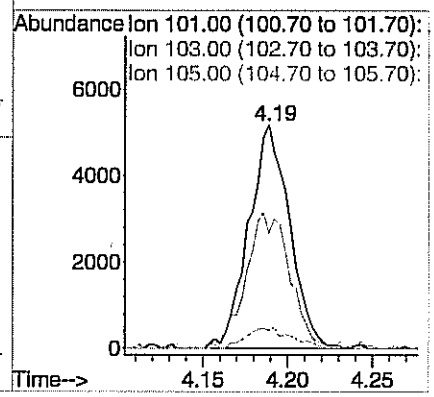


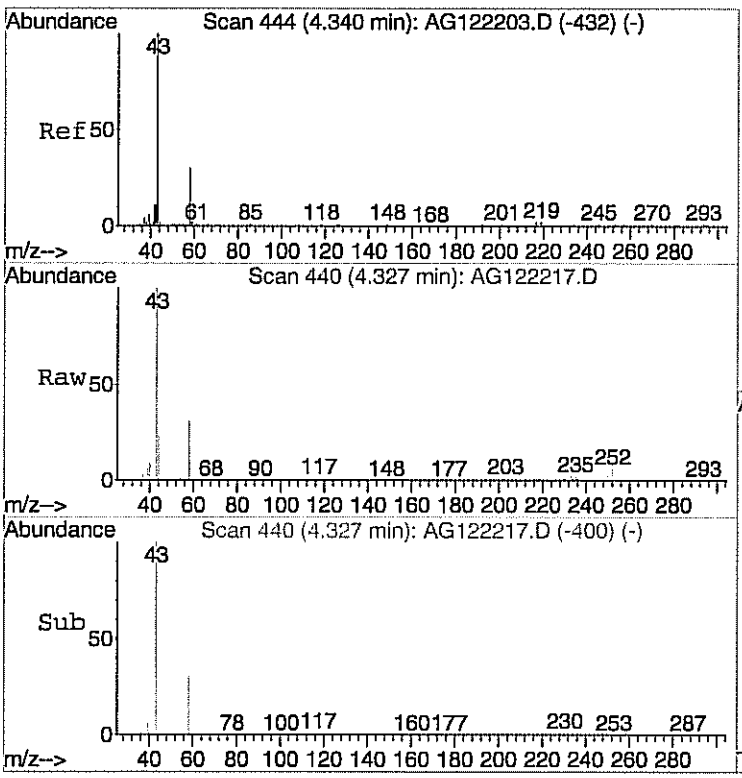


#11
Freon 11
Concen: 0.11 ppb
RT: 4.19 min Scan# 397
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:101 Resp: 8690

Ion	Ratio	Lower	Upper
101	100		
103	65.3	44.1	84.1
105	10.5	0.0	31.1

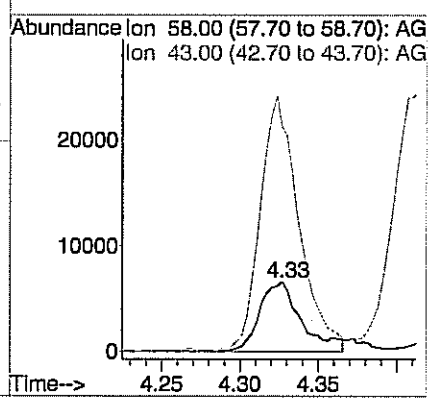


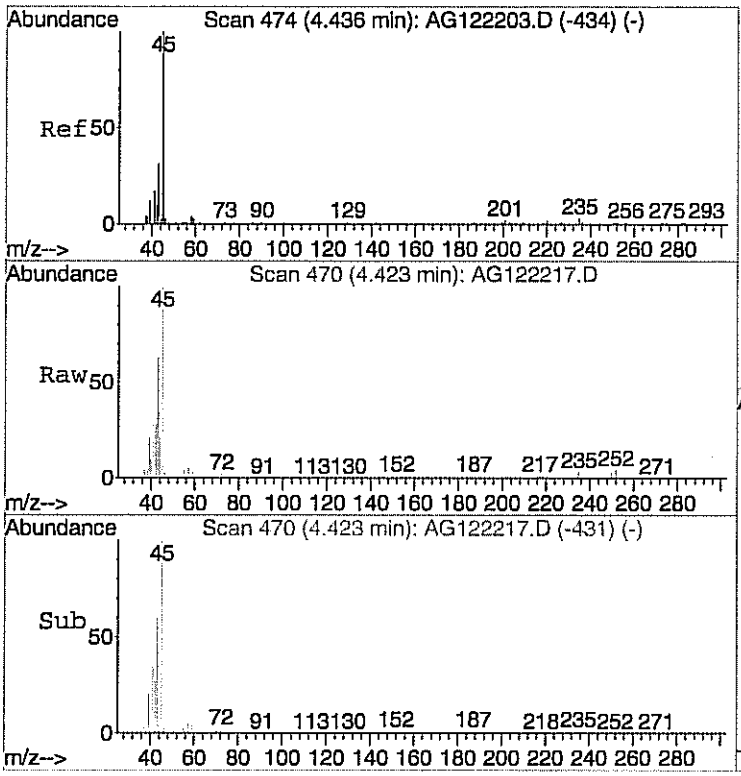


#12
Acetone
Concen: 1.63 ppb m
RT: 4.33 min Scan# 440
Delta R.T. -0.02 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 58 Resp: 12245

Ion	Ratio	Lower	Upper
58	100		
43	346.3	398.6	458.6#

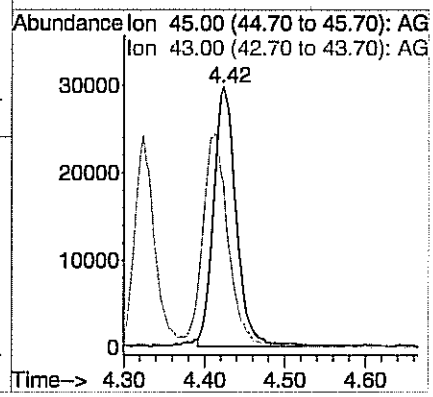


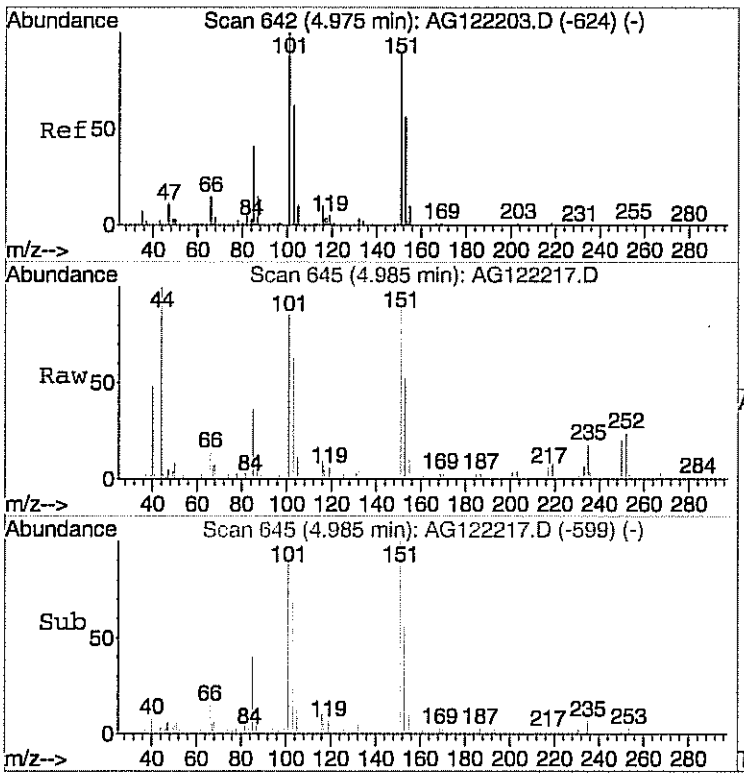


#13
Isopropyl alcohol
Concen: 2.87 ppb
RT: 4.42 min Scan# 470
Delta R.T. -0.03 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 45 Resp: 58565

Ion	Ratio	Lower	Upper
45	100		
43	92.3	0.0	20.0#

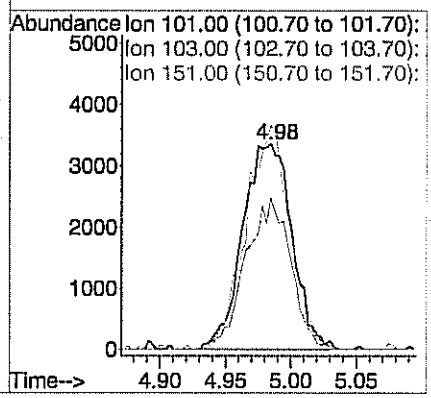


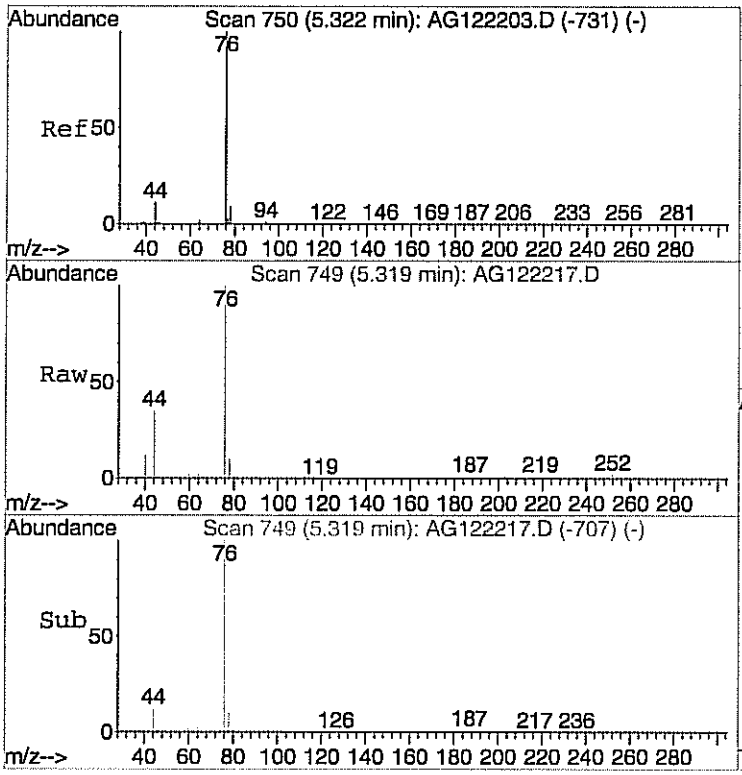


#15
Freon 113
Concen: 0.16 ppb
RT: 4.98 min Scan# 645
Delta R.T. -0.00 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:101 Resp: 8812

Ion	Ratio	Lower	Upper
101	100		
103	67.1	46.5	86.5
151	96.5	72.2	112.2

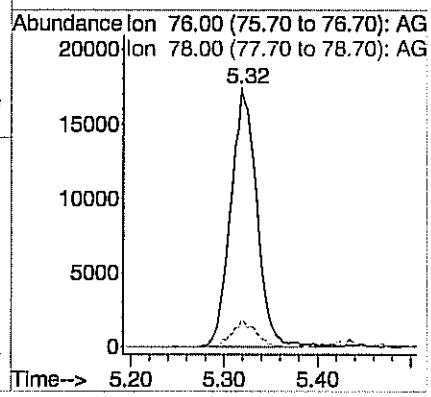


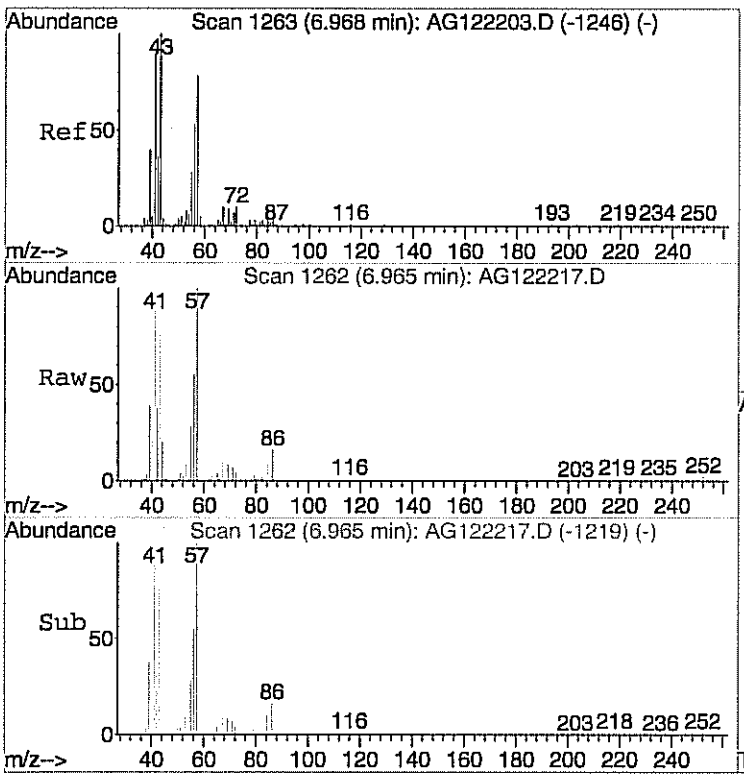


#18
Carbon disulfide
Concen: 0.49 ppb
RT: 5.32 min Scan# 749
Delta R.T. -0.02 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 76 Resp: 33848

Ion	Ratio	Lower	Upper
76	100		
78	9.2	0.0	29.6

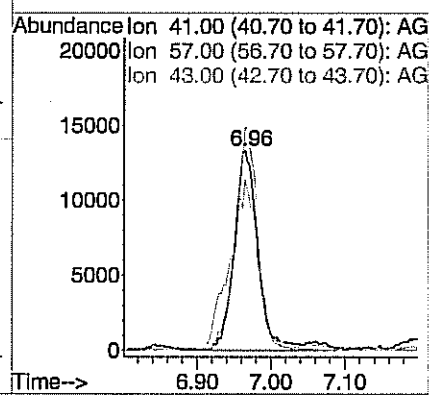


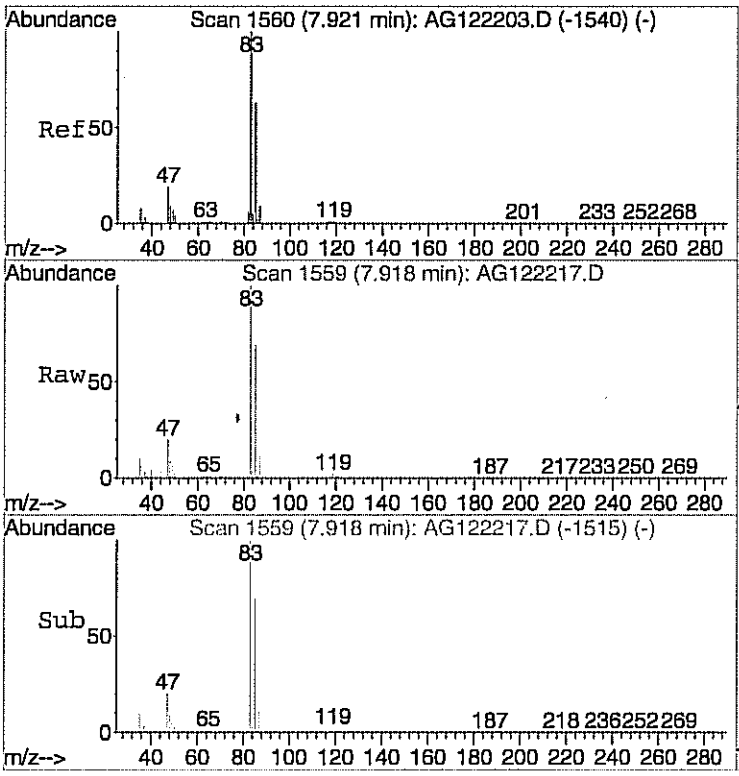


#25
Hexane
Concen: 1.70 ppb
RT: 6.96 min Scan# 1262
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 41 Resp: 30727

Ion	Ratio	Lower	Upper
41	100		
57	101.9	89.3	129.3
43	103.5	182.0	222.0#

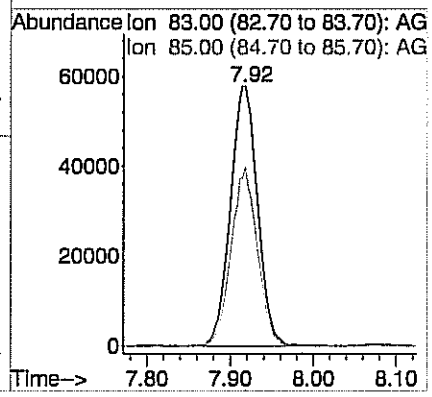


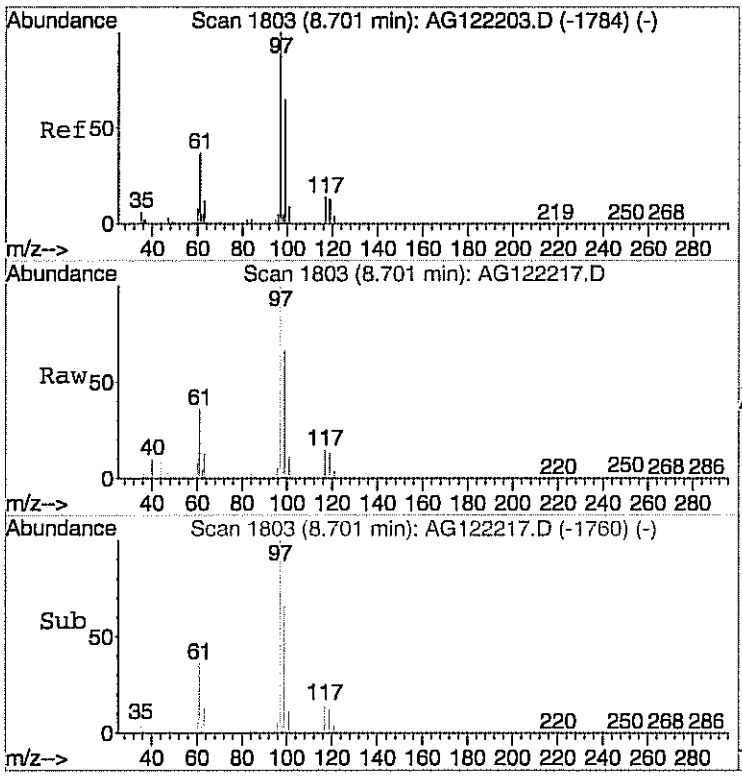


#27
Chloroform
Concen: 1.71 ppb
RT: 7.92 min Scan# 1559
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 83 Resp: 129664

Ion	Ratio	Lower	Upper
83	100		
85	66.8	46.6	86.6

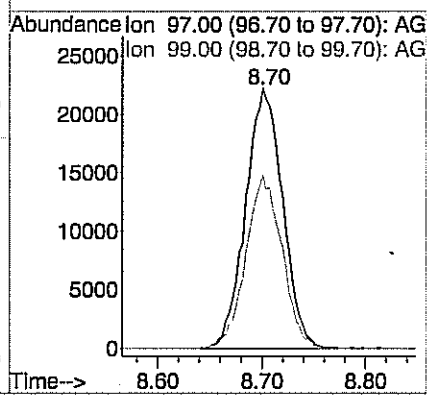


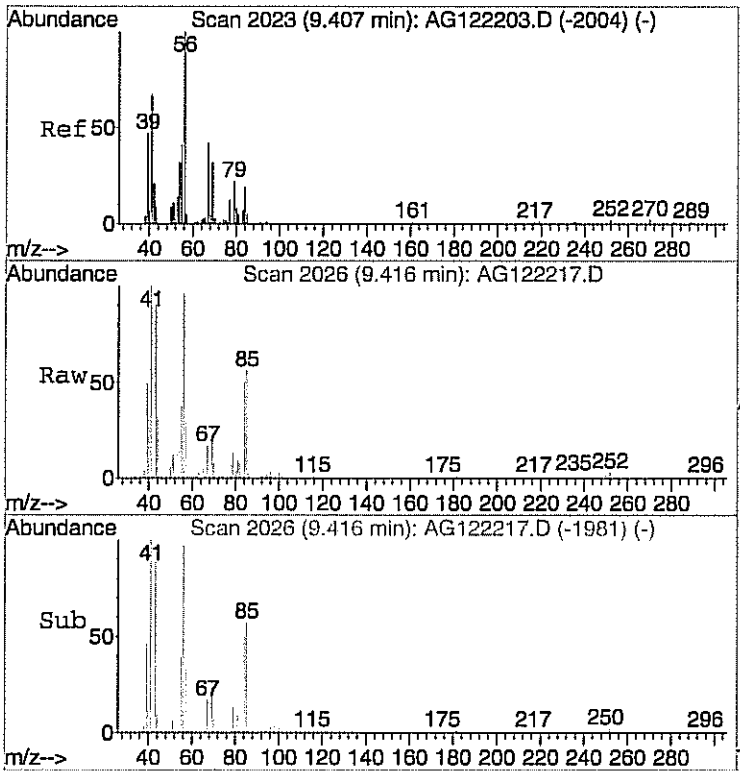


#31
1,1,1-trichloroethane
Concen: 0.61 ppb
RT: 8.70 min Scan# 1803
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 97 Resp: 54984

Ion	Ratio	Lower	Upper
97	100		
99	64.6	45.0	85.0

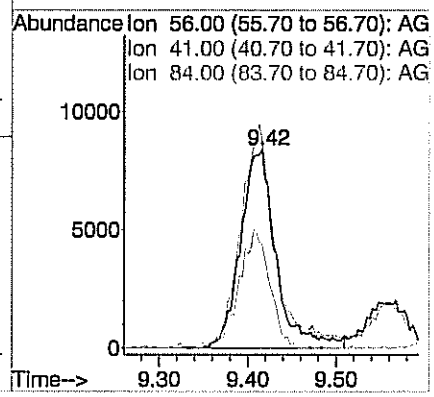


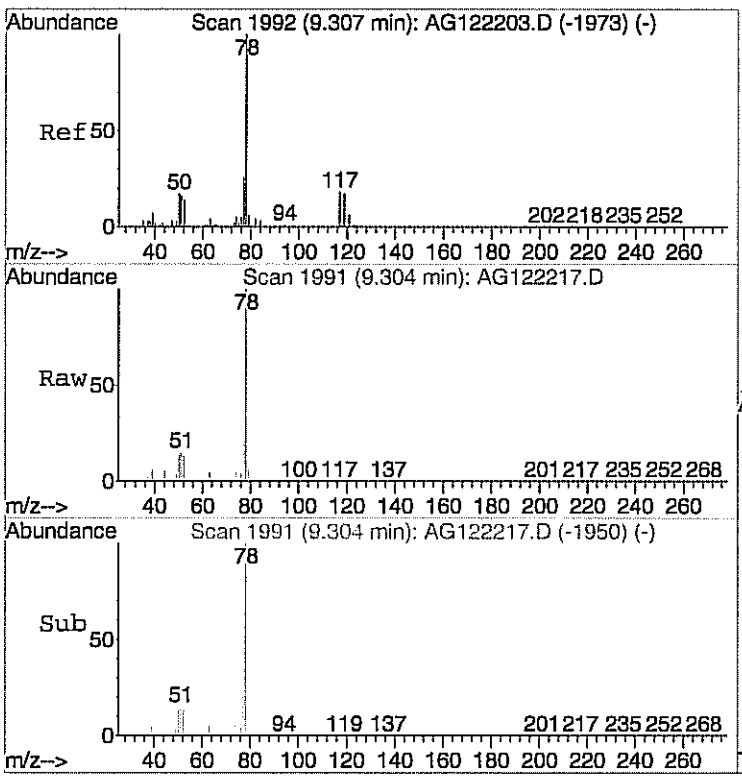


#32
Cyclohexane
Concen: 1.22 ppb m
RT: 9.42 min Scan# 2026
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 56 Resp: 23412

Ion	Ratio	Lower	Upper
56	100		
41	118.0	48.6	88.6#
84	50.7	161.6	201.6#

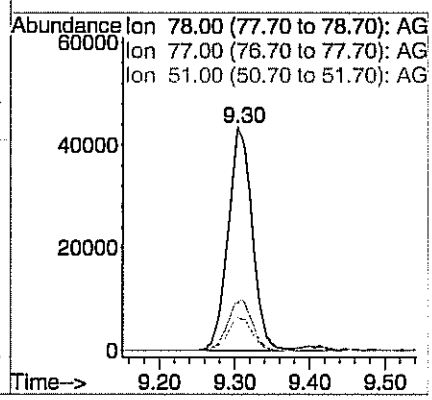


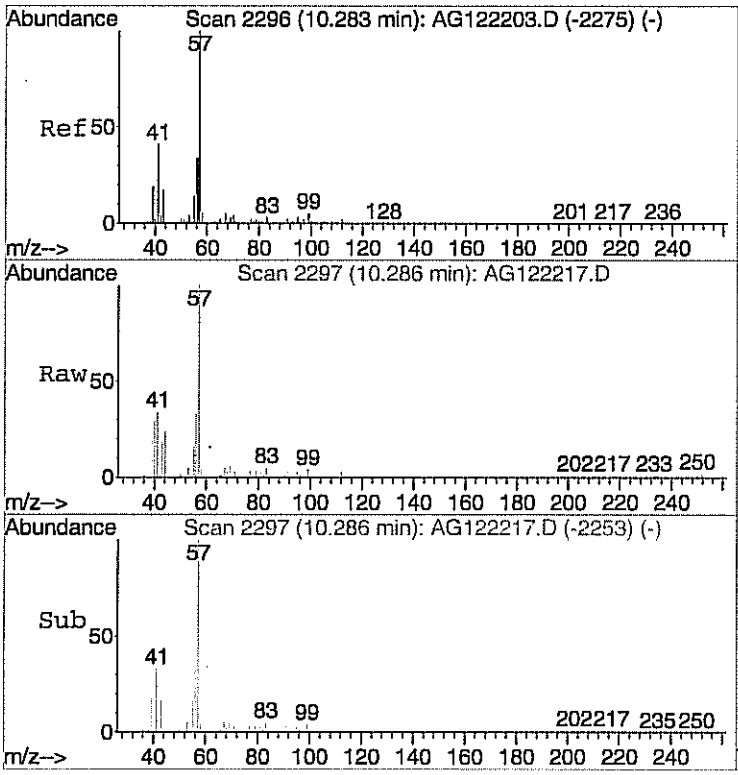


#34
Benzene
Concen: 1.44 ppb
RT: 9.30 min Scan# 1991
Delta R.T. -0.02 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 78 Resp: 99170

Ion	Ratio	Lower	Upper
78	100		
77	22.7	9.2	49.2
51	14.8	0.0	35.4

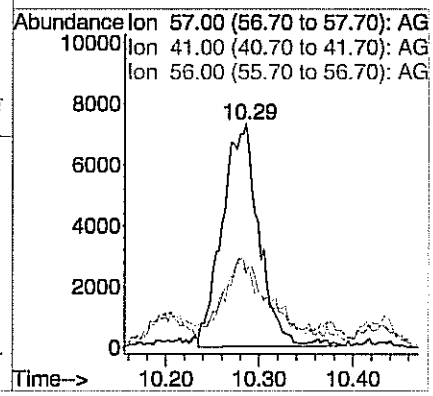


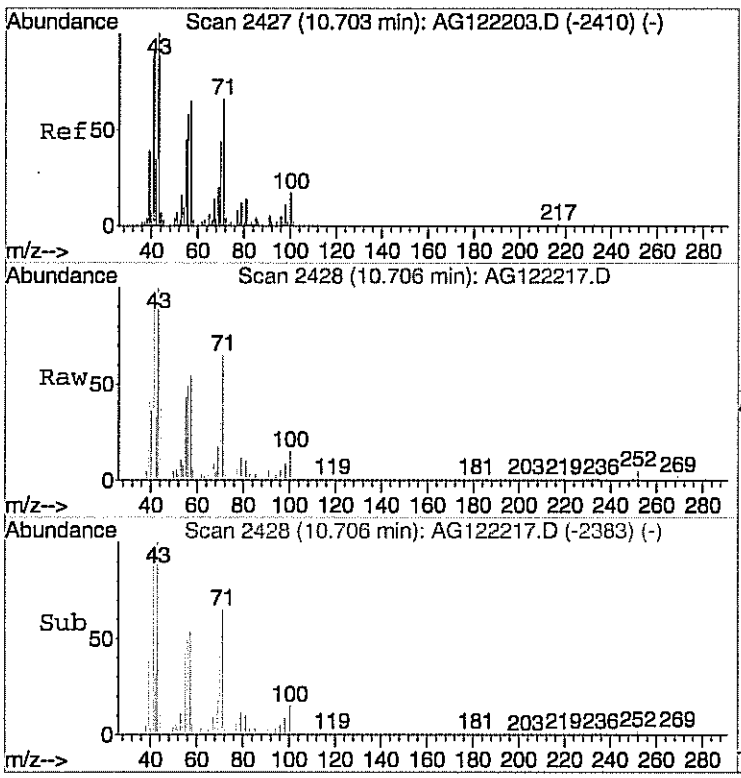


#36
2,2,4-trimethylpentane
Concen: 0.35 ppb
RT: 10.29 min Scan# 2297
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 57 Resp: 20093

Ion	Ratio	Lower	Upper
57	100		
41	81.4	17.9	57.9#
56	74.6	16.6	56.6#

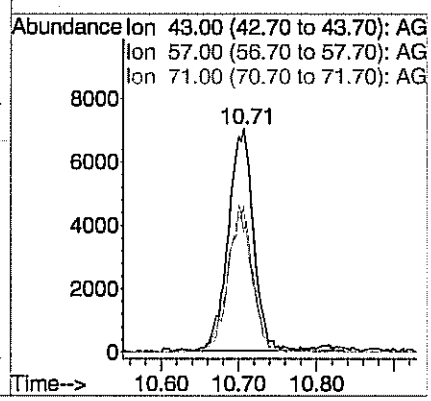


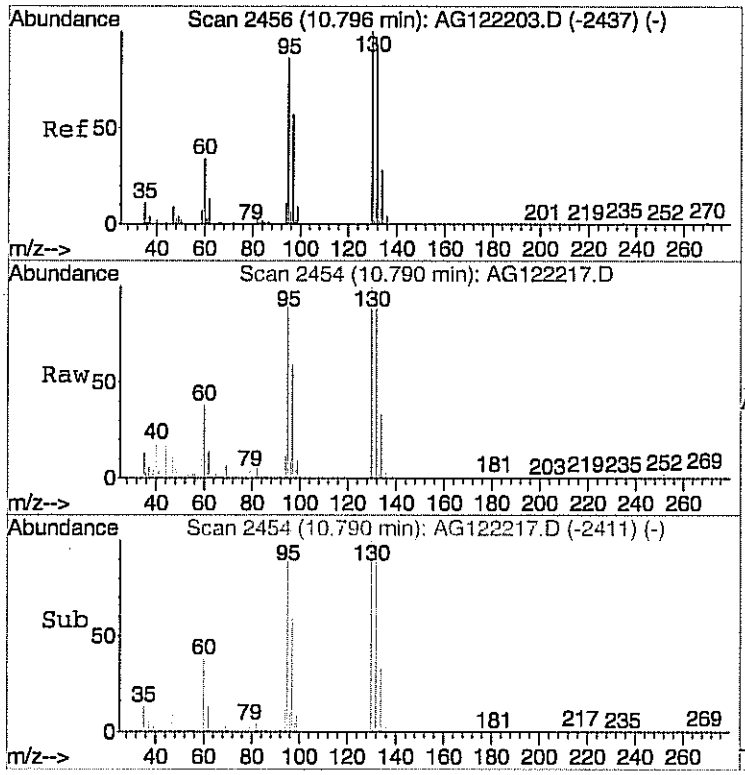


#37
Heptane
Concen: 0.90 ppb
RT: 10.71 min Scan# 2428
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 43 Resp: 16153

Ion	Ratio	Lower	Upper
43	100		
57	63.2	37.2	77.2
71	62.2	43.4	83.4

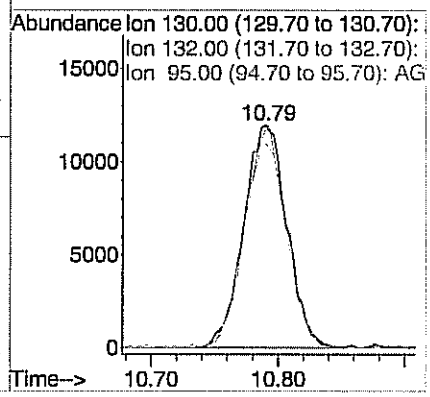


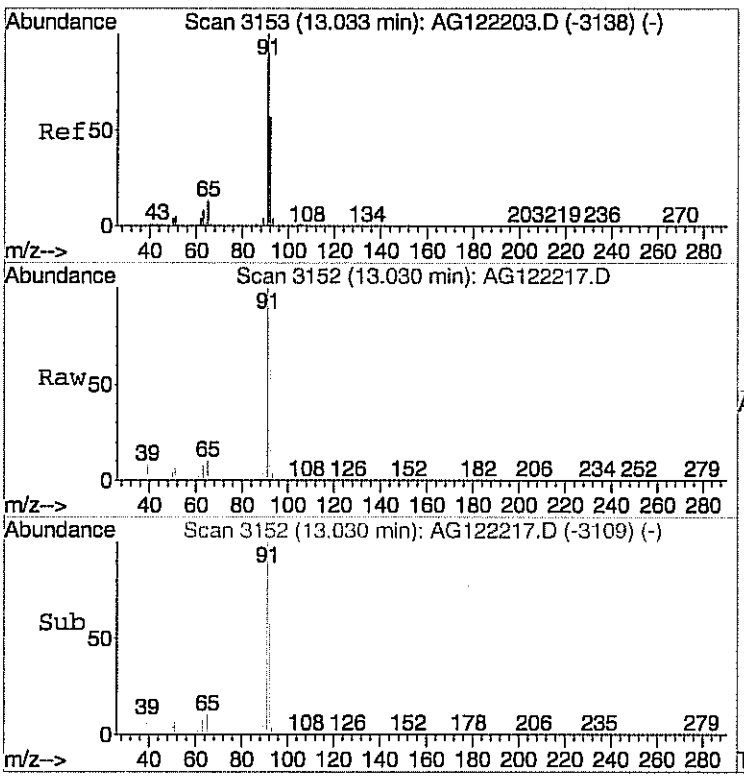


#38
Trichloroethene
Concen: 0.55 ppb
RT: 10.79 min Scan# 2454
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:130 Resp: 28196

Ion	Ratio	Lower	Upper
130	100		
132	96.1	77.3	117.3
95	91.2	71.1	111.1

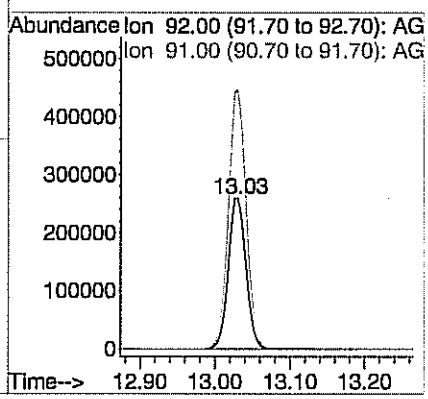


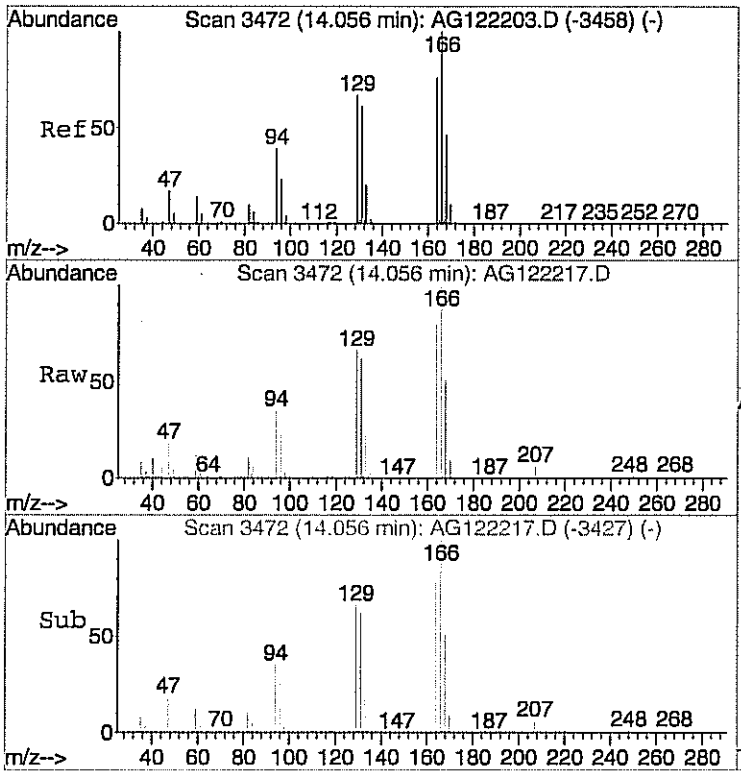


#45
Toluene
Concen: 9.71 ppb
RT: 13.03 min Scan# 3152
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 92 Resp: 423525

Ion	Ratio	Lower	Upper
92	100		
91	171.1	157.6	197.6

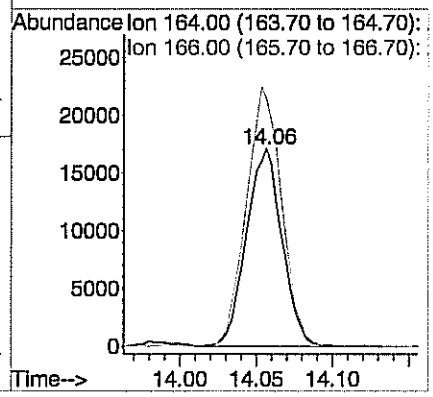


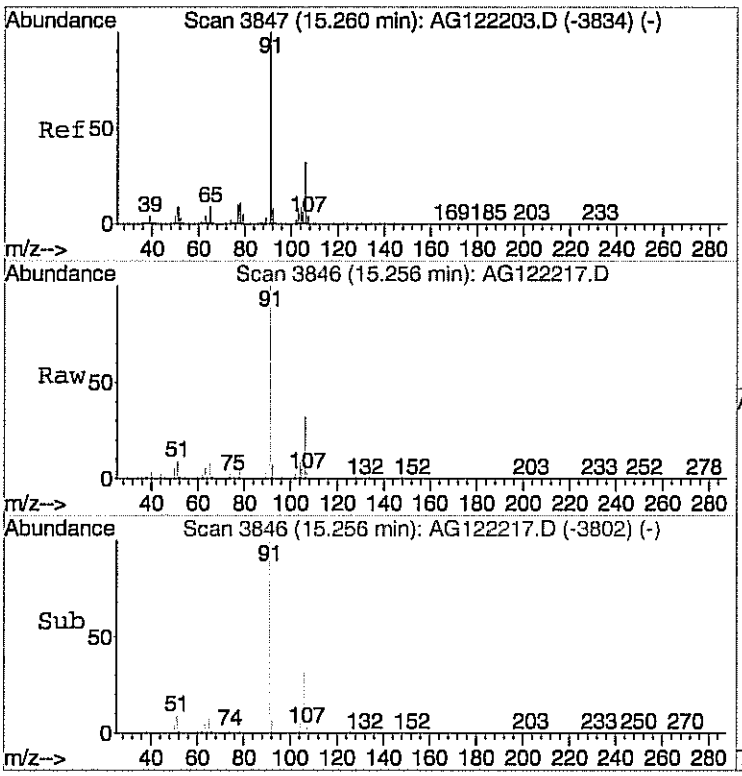


#50
Tetrachloroethylene
Concen: 0.45 ppb
RT: 14.06 min Scan# 3472
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:164 Resp: 27879

Ion	Ratio	Lower	Upper
164	100		
166	129.9	109.0	149.0

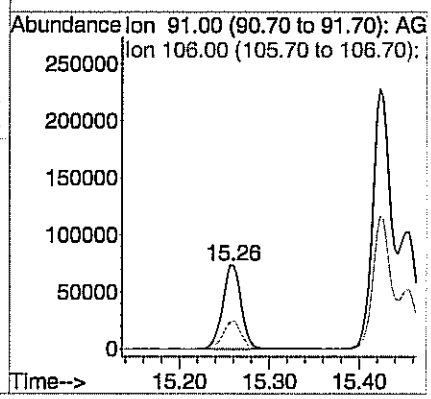


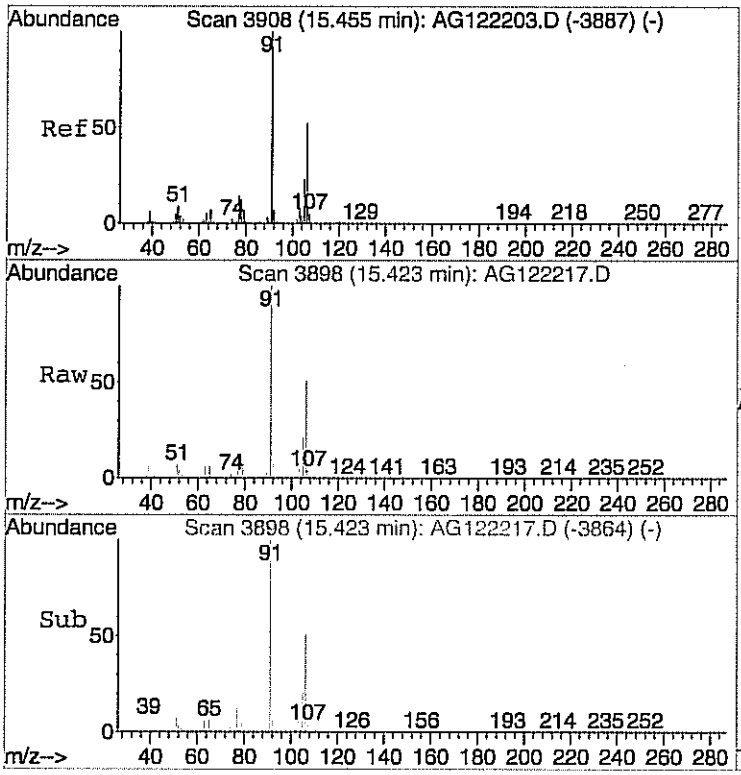


#52
Ethylbenzene
Concen: 1.35 ppb
RT: 15.26 min Scan# 3846
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 91 Resp: 106921

Ion	Ratio	Lower	Upper
91	100		
106	33.3	11.6	51.6

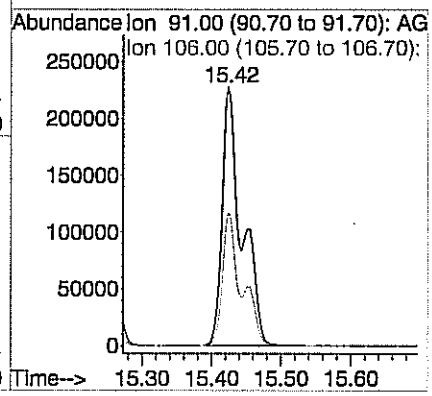


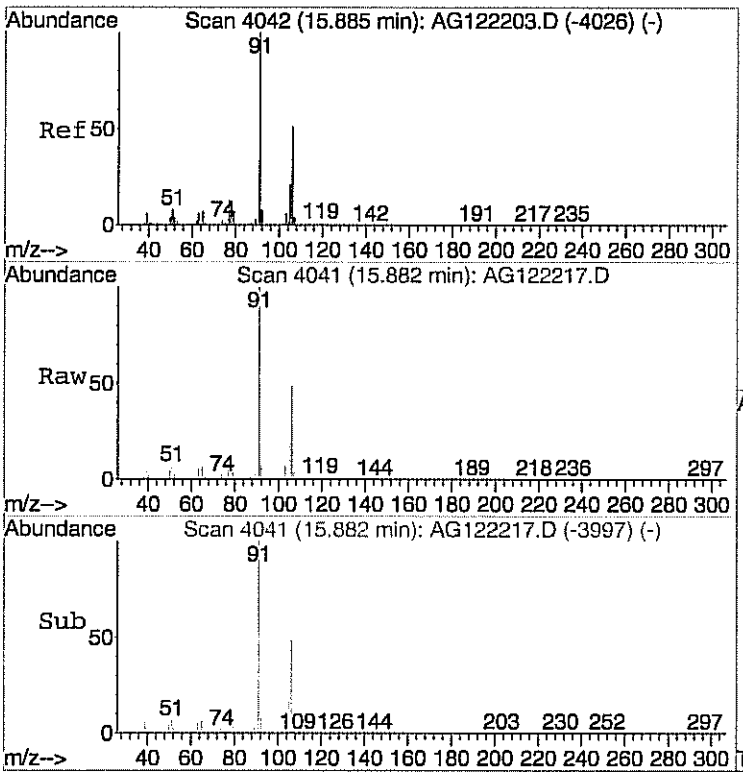


#53
m&p-xylene
Concen: 6.07 ppb
RT: 15.42 min Scan# 3898
Delta R.T. -0.04 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 91 Resp: 445938

Ion	Ratio	Lower	Upper
91	100		
106	50.5	29.0	69.0

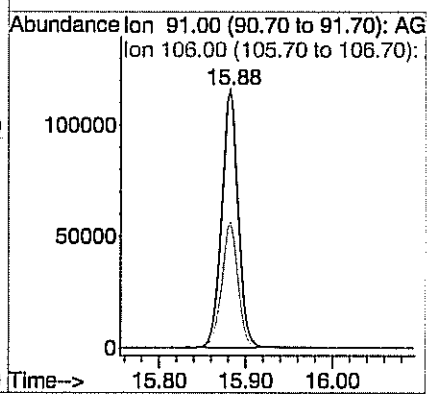


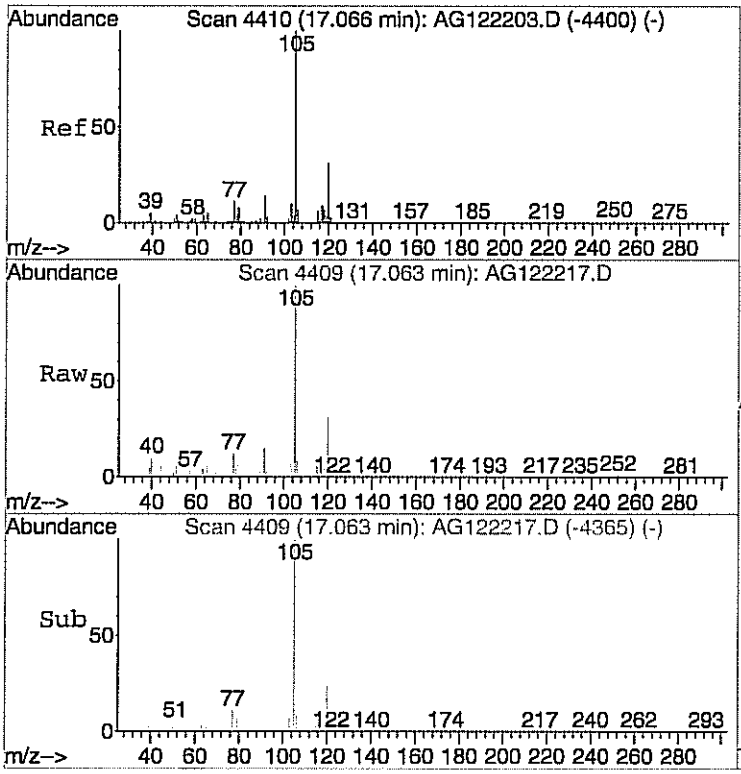


#56
o-xylene
Concen: 1.68 ppb
RT: 15.88 min Scan# 4041
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion: 91 Resp: 153240

Ion	Ratio	Lower	Upper
91	100		
106	48.3	29.4	69.4

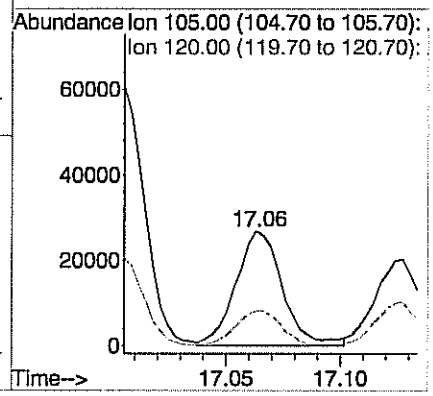


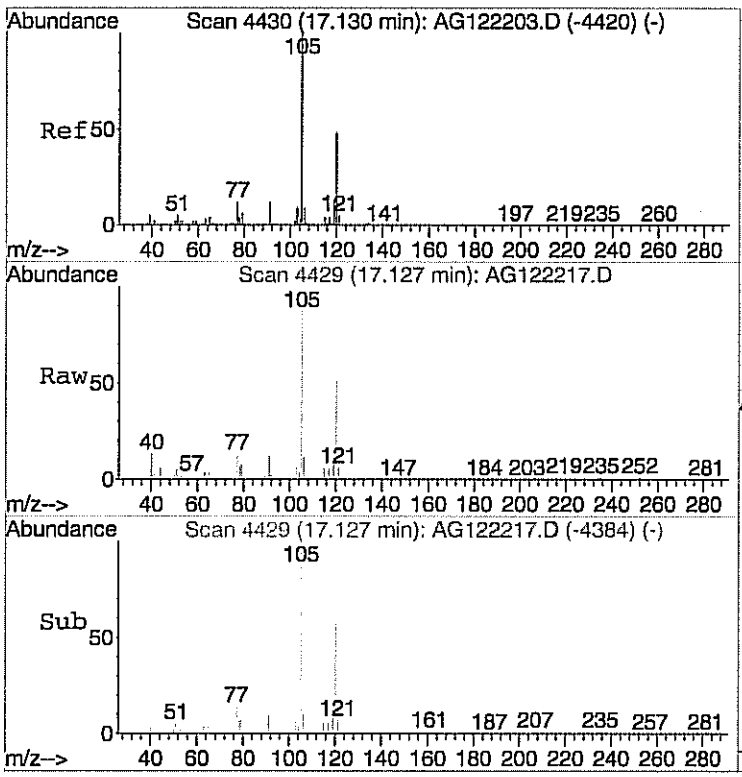


#59
4-ethyltoluene
Concen: 0.74 ppb
RT: 17.06 min Scan# 4409
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:105 Resp: 37701

Ion	Ratio	Lower	Upper
105	100		
120	30.7	11.8	51.8

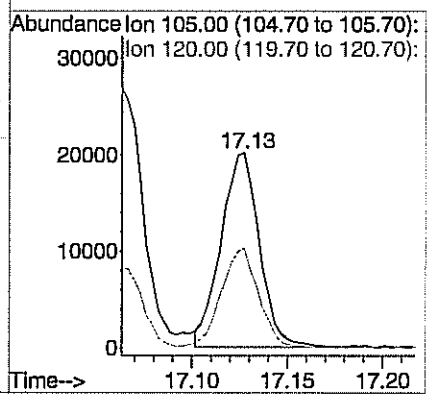


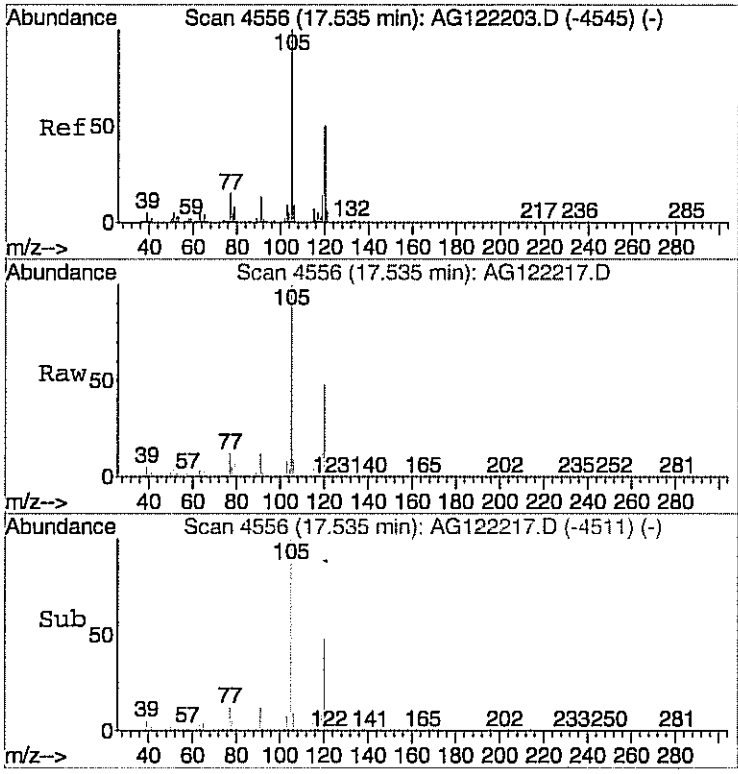


#60
1,3,5-trimethylbenzene
Concen: 0.42 ppb
RT: 17.13 min Scan# 4429
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:105 Resp: 28033

Ion	Ratio	Lower	Upper
105	100		
120	50.5	29.1	69.1

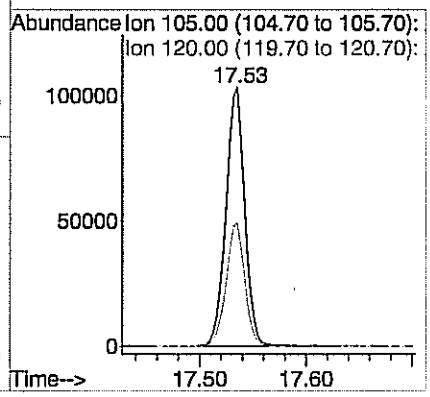


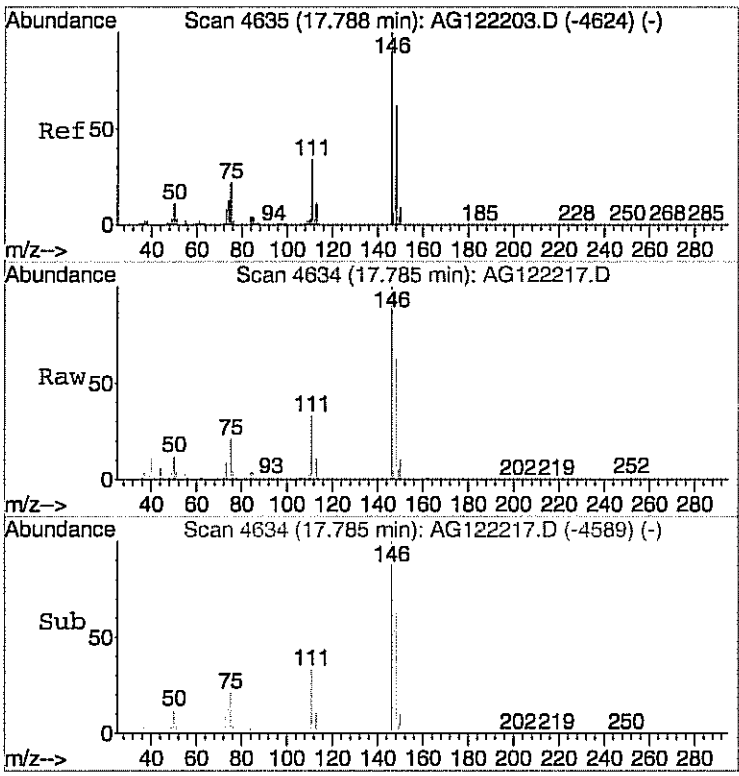


#61
1,2,4-trimethylbenzene
Concen: 2.57 ppb
RT: 17.53 min Scan# 4556
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:105 Resp: 126178

Ion	Ratio	Lower	Upper
105	100		
120	47.5	27.4	67.4

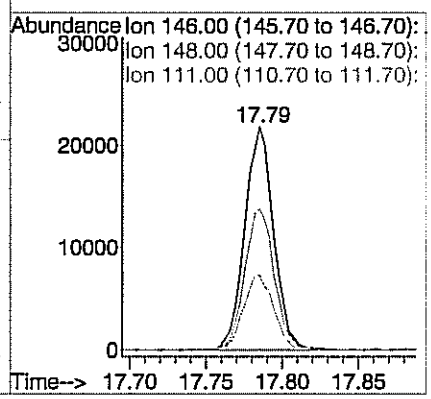




#62
1,3-dichlorobenzene
Concen: 0.39 ppb
RT: 17.79 min Scan# 4634
Delta R.T. -0.01 min
Lab File: AG122217.D
Acq: 22 Dec 2009 17:32

Tgt Ion:146 Resp: 28793

Ion	Ratio	Lower	Upper
146	100		
148	65.1	45.0	85.0
111	36.1	16.3	56.3



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122218.D Vial: 4
Acq On : 22 Dec 2009 18:05 Operator: RJP
Sample : C0912043-002A 20X Inst : MSD #1
Misc : C0912043-002A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 18:27:01 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

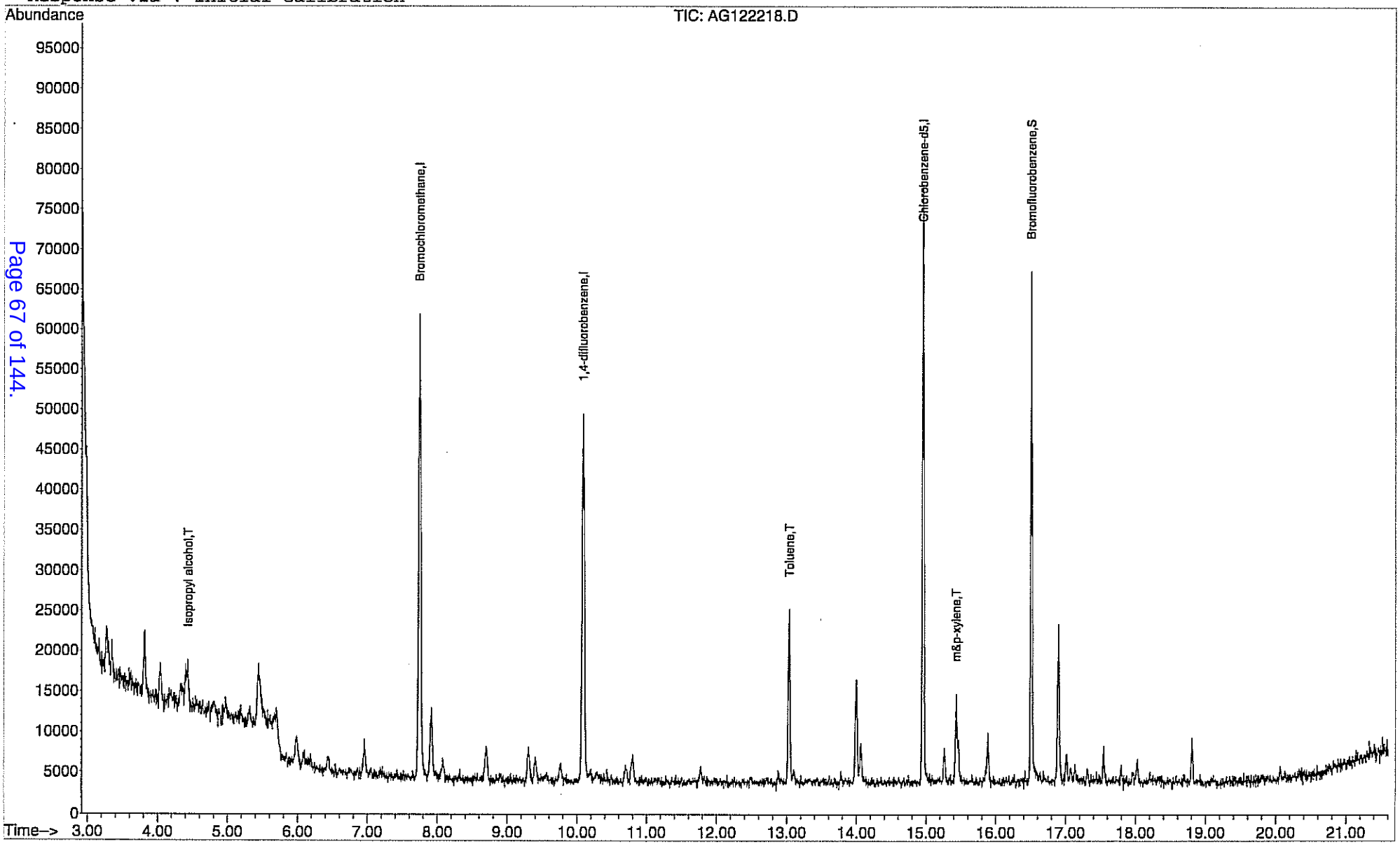
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.75	128	20658	1.00	ppb	-0.02
30) 1,4-difluorobenzene	10.09	114	48151	1.00	ppb	-0.01
44) Chlorobenzene-d5	14.95	117	42557	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	16557	0.84	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 84.00%			
Target Compounds						Qvalue
13) Isopropyl alcohol	4.44	45	4170	0.21	ppb	100
45) Toluene	13.03	92	9211	0.28	ppb	98
53) m&p-xylene	15.43	91	7690	0.14	ppb	95

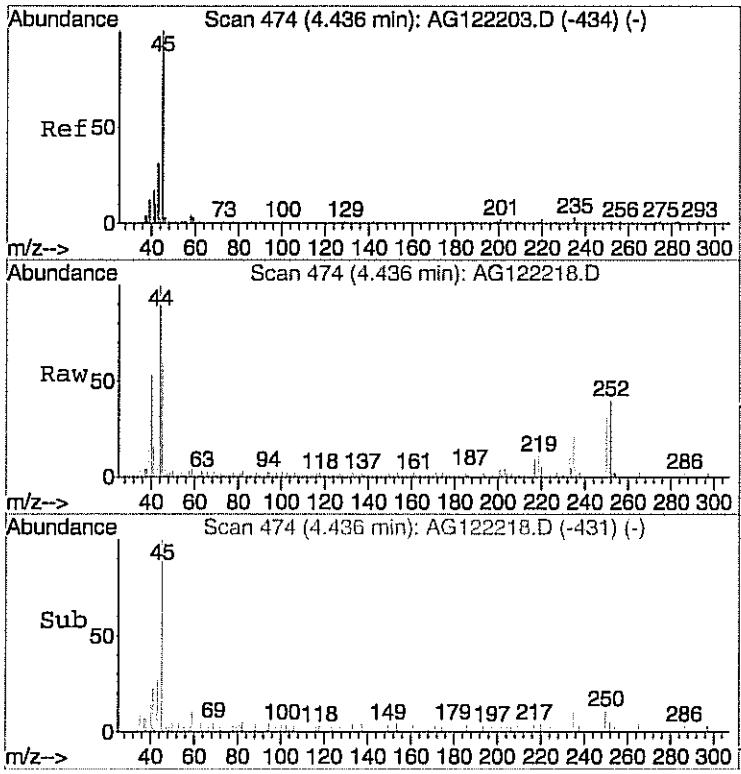
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122218.D Vial: 4
Acq On : 22 Dec 2009 18:05 Operator: RJP
Sample : C0912043-002A 20X Inst : MSD #1
Misc : C0912043-002A Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 24 8:45 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Initial Calibration

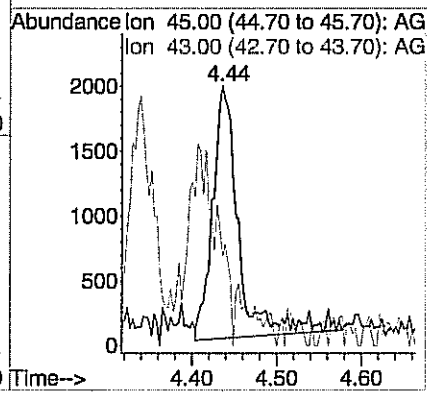


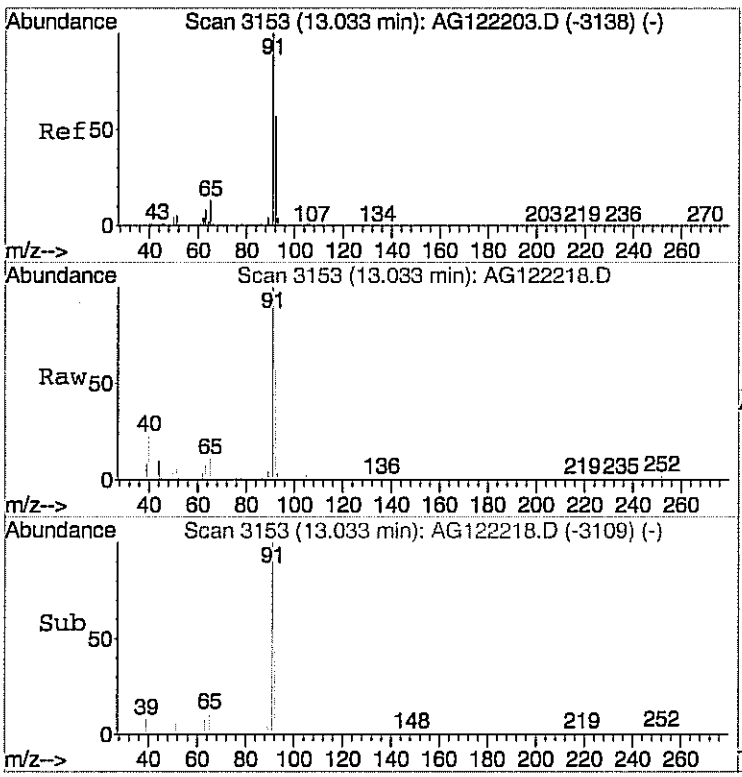


#13
Isopropyl alcohol
Concen: 0.21 ppb
RT: 4.44 min Scan# 474
Delta R.T. -0.01 min
Lab File: AG122218.D
Acq: 22 Dec 2009 18:05

Tgt Ion: 45 Resp: 4170

Ion	Ratio	Lower	Upper
45	100		
43	17.7	0.0	20.0

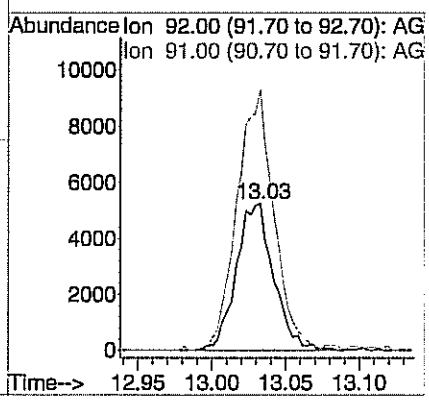


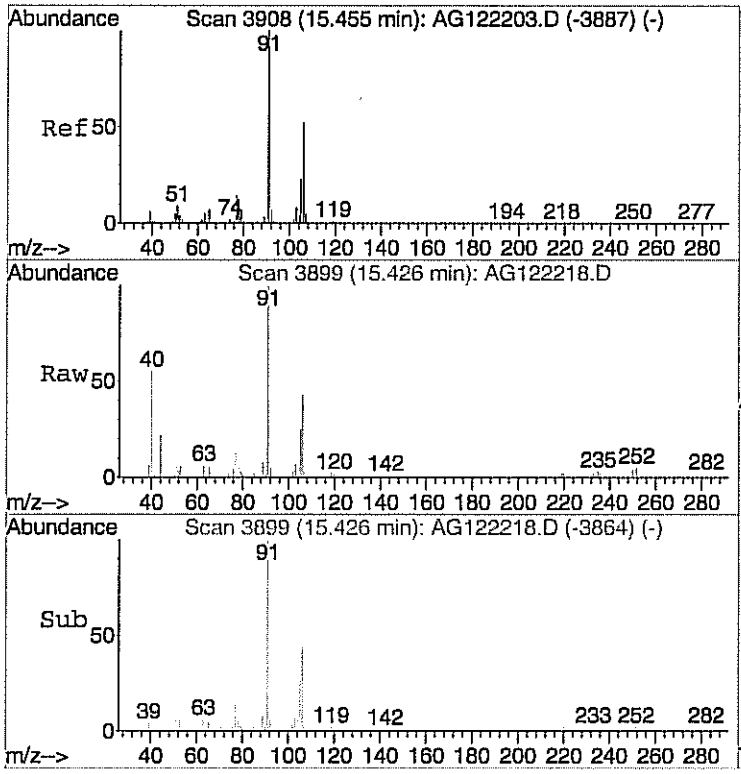


#45
Toluene
Concen: 0.28 ppb
RT: 13.03 min Scan# 3153
Delta R.T. -0.01 min
Lab File: AG122218.D
Acq: 22 Dec 2009 18:05

Tgt Ion: 92 Resp: 9211

Ion	Ratio	Lower	Upper
92	100		
91	174.8	157.6	197.6

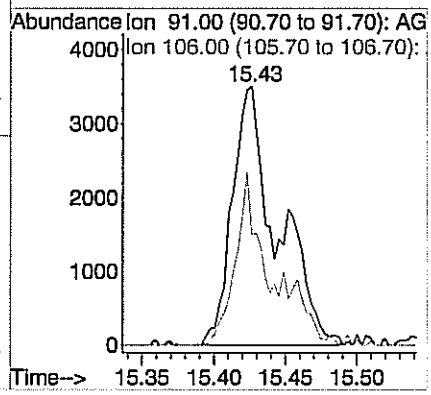




#53
m&p-xylene
Concen: 0.14 ppb
RT: 15.43 min Scan# 3899
Delta R.T. -0.04 min
Lab File: AG122218.D
Acq: 22 Dec 2009 18:05

Tgt Ion: 91 Resp: 7690

Ion	Ratio	Lower	Upper
91	100		
106	52.4	29.0	69.0



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS DATA

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INITIAL CALIBRATION

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration

Calibration Files
0.04 =AG111621.D 0.10 =AG111619.D 0.15 =AG111618.D
0.30 =AG111617.D 0.50 =AG111616.D 0.75 =AG111615.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------							
2)	T	Propylene			0.758	0.608	0.617	0.595	0.613	10.09
3)	T	Freon 12			6.467	5.222	5.168	4.890	5.150	10.77
4)	T	Chloromethane			1.376	1.141	1.109	1.115	1.120	9.75
5)	T	Freon 114			4.176	3.459	3.467	3.215	3.394	10.00
6)	T	Vinyl Chloride	1.565	1.260	1.213	0.987	0.961	0.927	1.060	20.71
7)	T	1,3-butadiene			1.023	0.930	0.840	0.802	0.847	10.25
8)	T	Bromomethane			1.556	1.246	1.206	1.166	1.212	12.10
9)	T	Chloroethane			0.525	0.387	0.391	0.373	0.393	14.18
10)	T	Vinyl Bromide			1.455	1.183	1.220	1.149	1.202	8.87
11)	T	Freon 11			4.253	3.595	3.622	3.405	3.580	8.18
12)	T	Acetone			0.401	0.386	0.347	0.328	0.346	8.93
13)	T	Isopropyl alcoh			1.408	1.071	0.941	0.850	0.943	22.18
14)	T	1,1-dichloroeth			1.454	1.187	1.115	1.100	1.141	11.92
15)	T	Freon 113			3.088	2.627	2.638	2.405	2.577	8.76
16)	T	Methylene chlor			1.182	0.944	0.962	0.915	0.991	14.83
17)	T	Allyl chloride			1.103	0.895	0.877	0.828	0.872	11.78
18)	T	Carbon disulfid			3.634	2.987	2.948	2.749	3.157	13.81
19)	T	trans-1,2-dichl			1.721	1.398	1.546	1.461	1.456	8.51
20)	T	methyl tert-but			1.801	1.799	1.562	1.683	1.710	6.32
21)	T	1,1-dichloroeth			2.644	2.175	2.213	2.136	2.201	8.37
22)	T	Vinyl acetate			1.025	0.919	0.936	0.908	0.962	5.84
23)	T	Methyl Ethyl Ke			1.504	1.469	1.524	1.583	1.630	9.11
24)	T	cis-1,2-dichlor			1.369	1.115	1.144	1.133	1.182	6.91
25)	T	Hexane			0.906	0.729	0.787	0.775	0.832	8.43
26)	T	Ethyl acetate			1.155	0.960	1.012	1.079	1.109	8.73
27)	T	Chloroform			4.181	3.508	3.510	3.409	3.504	8.24
28)	T	Tetrahydrofuran			0.319	0.396	0.365	0.416	0.422	14.74
29)	T	1,2-dichloroeth			2.283	1.864	1.906	1.797	1.908	8.22
30)	I	1,4-difluorobenzene	----------ISTD----------							
31)	T	1,1,1-trichloro			1.831	1.520	1.477	1.474	1.555	8.01
32)	T	Cyclohexane			0.256	0.275	0.292	0.320	0.333	18.73
33)	T	Carbon tetrachl	3.780	2.525	2.462	1.989	1.963	1.942	2.281	24.90
34)	T	Benzene			1.261	1.153	1.049	1.100	1.194	8.42
35)	T	1,4-dioxane			0.188	0.186	0.157	0.152	0.158	13.00
36)	T	2,2,4-trimethyl			1.018	0.829	0.864	0.904	0.996	13.11
37)	T	Heptane			0.338	0.262	0.264	0.280	0.313	14.71
38)	T	Trichloroethene	1.274	0.889	0.909	0.745	0.784	0.805	0.898	16.32
39)	T	1,2-dichloropro			0.493	0.430	0.426	0.440	0.465	6.82
40)	T	Bromodichlorome			1.717	1.460	1.453	1.466	1.529	6.45
41)	T	cis-1,3-dichlor			0.544	0.494	0.466	0.552	0.571	14.46
42)	T	trans-1,3-dichl			0.480	0.427	0.404	0.421	0.459	9.76
43)	T	1,1,2-trichloro			0.906	0.736	0.719	0.745	0.782	8.09
44)	I	Chlorobenzene-d5	----------ISTD----------							
45)	T	Toluene			0.708	0.710	0.660	0.681	0.767	14.07
46)	T	Methyl Isobutyl				0.554	0.519	0.399	0.439	17.99
47)	T	Dibromochlorome			2.250	1.955	1.941	1.930	1.979	6.09
48)	T	Methyl Butyl Ke			0.484	0.361	0.462	0.348	0.402	11.90
49)	T	1,2-dibromoetha			1.371	1.153	1.240	1.211	1.268	6.18
50)	T	Tetrachloroethy			1.224	1.029	1.055	1.060	1.083	6.34
51)	T	Chlorobenzene			1.534	1.332	1.366	1.355	1.438	7.03
52)	T	Ethylbenzene			1.269	1.126	1.189	1.263	1.398	17.69
53)	T	m&p-xylene			1.007	0.890	1.005	1.141	1.292	26.14
54)	T	Styrene			0.633	0.565	0.634	0.691	0.748	20.91
55)	T	Bromoform			2.119	1.873	1.869	1.986	2.031	5.61

Response Factor Report MSD #1

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration

Calibration Files
0.04 =AG111621.D 0.10 =AG111619.D 0.15 =AG111618.D
0.30 =AG111617.D 0.50 =AG111616.D 0.75 =AG111615.D

		Compound	0.04	0.10	0.15	0.30	0.50	0.75	Avg	%RSD
56)	T	o-xylene			1.448	1.304	1.451	1.267	1.604	19.75
57)	S	Bromofluorobenz	0.379	0.396	0.415	0.435	0.472	0.485	0.461	11.24
58)	T	1,1,2,2-tetrach			1.735	1.493	1.555	1.613	1.661	6.48
59)	T	4-ethyltoluene			0.748	0.669	0.765	0.818	0.899	22.17
60)	T	1,3,5-trimethyl			0.896	0.846	0.868	1.066	1.186	26.75
61)	T	1,2,4-trimethyl			0.768	0.607	0.702	0.757	0.863	21.85
62)	T	1,3-dichloroben			1.075	0.960	1.110	1.215	1.314	20.31
63)	T	benzyl chloride			0.670	0.439	0.504	0.599	0.634	19.25
64)	T	1,4-dichloroben			0.947	0.887	1.051	1.137	1.283	25.58
65)	T	1,2-dichloroben			1.031	0.901	0.968	1.120	1.221	21.47
66)	T	1,2,4-trichloro			0.411	0.373	0.407	0.464	0.483	18.02
67)	T	Naphthalene			0.549	0.388	0.350	0.413	0.433	15.86
68)	T	Hexachloro-1,3-			1.032	0.916	0.990	1.113	1.149	14.75

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111611.D Vial: 2
Acq On : 16 Nov 2009 20:23 Operator: RJP
Sample : A1UT_2.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:20:01 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17824	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	39814	1.00	ppb		0.00
44) Chlorobenzene-d5	14.95	117	37720	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.51	95	20113	1.09	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 109.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	20919	2.00	ppb		89
3) Freon 12	3.00	85	174631	1.98	ppb		98
4) Chloromethane	3.14	50	37669	2.00	ppb		98
5) Freon 114	3.14	85	115122	1.96	ppb		99
6) Vinyl Chloride	3.28	62	31965	1.82	ppb		100
7) 1,3-butadiene	3.36	39	28056	1.90	ppb		77
8) Bromomethane	3.61	94	39303	1.88	ppb		95
9) Chloroethane	3.74	64	13143	1.84	ppb		96
10) Vinyl Bromide	3.99	106	41375	1.96	ppb		99
11) Freon 11	4.20	101	124053	1.95	ppb		99
12) Acetone	4.34	58	11709	1.94	ppb	#	85
13) Isopropyl alcohol	4.44	45	29376	2.05	ppb	#	40
14) 1,1-dichloroethene	4.81	96	38575	1.93	ppb		92
15) Freon 113	4.99	101	89209	1.98	ppb		99
16) Methylene chloride	5.21	84	44964	2.77	ppb	#	84
17) Allyl chloride	5.20	41	31496	2.18	ppb		87
18) Carbon disulfide	5.34	76	134328	2.61	ppb		98
19) trans-1,2-dichloroethene	6.06	61	49805	2.00	ppb		89
20) methyl tert-butyl ether	6.11	73	66630	2.24	ppb		93
21) 1,1-dichloroethane	6.45	63	76592	2.02	ppb		99
22) Vinyl acetate	6.48	43	37956	2.25	ppb		97
23) Methyl Ethyl Ketone	6.97	43	68684	2.31	ppb		98
24) cis-1,2-dichloroethene	7.34	61	43109	2.04	ppb		92
25) Hexane	6.97	41	33428	2.27	ppb		92
26) Ethyl acetate	7.54	43	45112	2.30	ppb		99
27) Chloroform	7.93	83	121879	1.98	ppb		98
28) Tetrahydrofuran	8.11	42	18378	2.36	ppb		98
29) 1,2-dichloroethane	9.01	62	67182	2.00	ppb		99
31) 1,1,1-trichloroethane	8.71	97	128926	2.05	ppb		99
32) Cyclohexane	9.42	56	35717	2.53	ppb		96
33) Carbon tetrachloride	9.36	117	169386	2.02	ppb		99
34) Benzene	9.32	78	109625	2.32	ppb		94
35) 1,4-dioxane	11.14	88	12882m	2.53	ppb		
36) 2,2,4-trimethylpentane	10.30	57	98631	2.36	ppb		97
37) Heptane	10.72	43	31886	2.47	ppb		97
38) Trichloroethene	10.81	130	75934	2.11	ppb		99
39) 1,2-dichloropropane	10.93	63	40543	2.06	ppb		100
40) Bromodichloromethane	11.31	83	129919	2.09	ppb		100
41) cis-1,3-dichloropropene	12.20	75	58825	2.57	ppb		99
42) trans-1,3-dichloropropene	13.00	75	43500	2.34	ppb		98
43) 1,1,2-trichloroethane	13.30	97	66654	2.08	ppb		97
45) Toluene	13.05	92	74962	2.52	ppb		99
46) Methyl Isobutyl Ketone	12.16	43	36620	2.74	ppb		97
47) Dibromochloromethane	13.98	129	151621	2.01	ppb		99
48) Methyl Butyl Ketone	13.53	43	28408	1.95	ppb		95
49) 1,2-dibromoethane	14.22	107	102904	2.05	ppb		98
50) Tetrachloroethylene	14.07	164	85771	2.05	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111611.D Vial: 2
Acq On : 16 Nov 2009 20:23 Operator: RJP
Sample : A1UT_2.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:20:01 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	120918	2.12	ppb	98
52)	Ethylbenzene	15.27	91	143005	2.56	ppb	98
53)	m&p-xylene	15.47	91	282690	5.29	ppb	100
54)	Styrene	15.86	104	80027	2.69	ppb	99
55)	Bromoform	15.95	173	164167	2.02	ppb	100
56)	o-xylene	15.89	91	167677	2.76	ppb	94
58)	1,1,2,2-tetrachloroethane	16.31	83	136387	2.05	ppb	98
59)	4-ethyltoluene	17.08	105	97466m	2.84	ppb	
60)	1,3,5-trimethylbenzene	17.13	105	129572m	2.58	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	87066m	2.57	ppb	
62)	1,3-dichlorobenzene	17.79	146	132529	2.44	ppb	99
63)	benzyl chloride	17.86	91	63041	2.55	ppb	100
64)	1,4-dichlorobenzene	17.91	146	137542	2.56	ppb	98
65)	1,2-dichlorobenzene	18.19	146	126936	2.51	ppb	98
66)	1,2,4-trichlorobenzene	19.81	180	48247	2.42	ppb	95
67)	Naphthalene	19.96	128	39560	2.57	ppb	99
68)	Hexachloro-1,3-butadiene	20.07	225	107533	2.19	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

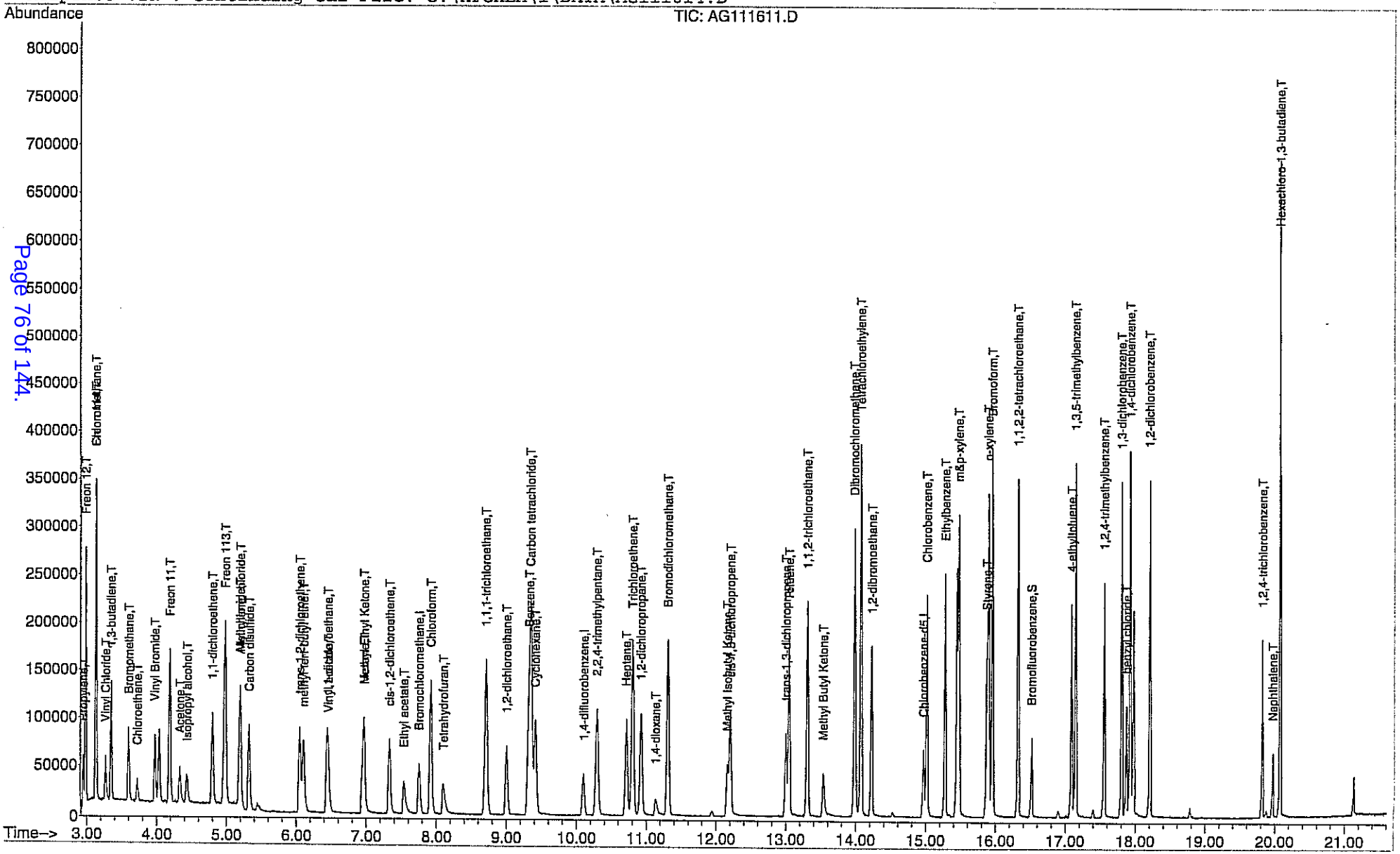
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111611.D
Acq On : 16 Nov 2009 20:23
Sample : A1UT_2.0
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:35 2009

Vial: 2
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111612.D Vial: 3
Acq On : 16 Nov 2009 20:57 Operator: RJP
Sample : A1UT_1.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:00 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17738	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	41286	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	37686	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.51	95	19403	1.06	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 106.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	15884	1.53	ppb		85
3) Freon 12	3.00	85	127144	1.45	ppb		98
4) Chloromethane	3.14	50	28305	1.51	ppb		97
5) Freon 114	3.14	85	84890	1.45	ppb		99
6) Vinyl Chloride	3.28	62	24083	1.38	ppb		100
7) 1,3-butadiene	3.36	39	20527	1.40	ppb		73
8) Bromomethane	3.61	94	30052	1.44	ppb		100
9) Chloroethane	3.74	64	9270	1.30	ppb		99
10) Vinyl Bromide	3.99	106	30461	1.45	ppb		97
11) Freon 11	4.20	101	90245	1.42	ppb		99
12) Acetone	4.35	58	8385	1.40	ppb	#	78
13) Isopropyl alcohol	4.45	45	22492	1.58	ppb		97
14) 1,1-dichloroethene	4.81	96	27533	1.38	ppb		93
15) Freon 113	4.99	101	63918	1.43	ppb		97
16) Methylene chloride	5.21	84	23241	1.44	ppb		94
17) Allyl chloride	5.20	41	20569	1.43	ppb		93
18) Carbon disulfide	5.33	76	71379	1.39	ppb		99
19) trans-1,2-dichloroethene	6.06	61	37232	1.50	ppb		90
20) methyl tert-butyl ether	6.12	73	45544	1.54	ppb		91
21) 1,1-dichloroethane	6.45	63	55709	1.48	ppb		99
22) Vinyl acetate	6.48	43	25954	1.54	ppb		99
23) Methyl Ethyl Ketone	6.97	43	45999	1.55	ppb		97
24) cis-1,2-dichloroethene	7.34	61	31155	1.48	ppb		96
25) Hexane	6.97	41	23251	1.58	ppb		97
26) Ethyl acetate	7.55	43	31638	1.62	ppb		98
27) Chloroform	7.93	83	87853	1.43	ppb		97
28) Tetrahydrofuran	8.11	42	12560	1.62	ppb		97
29) 1,2-dichloroethane	9.01	62	48804	1.46	ppb		100
31) 1,1,1-trichloroethane	8.71	97	91602	1.41	ppb		99
32) Cyclohexane	9.42	56	23624	1.61	ppb		94
33) Carbon tetrachloride	9.36	117	122231	1.41	ppb		100
34) Benzene	9.32	78	76360	1.56	ppb		96
35) 1,4-dioxane	11.14	88	9178	1.74	ppb		100
36) 2,2,4-trimethylpentane	10.30	57	64964	1.50	ppb		96
37) Heptane	10.72	43	20506	1.53	ppb		98
38) Trichloroethene	10.80	130	53333	1.43	ppb		99
39) 1,2-dichloropropane	10.93	63	28845	1.41	ppb		100
40) Bromodichloromethane	11.31	83	90855	1.41	ppb		98
41) cis-1,3-dichloropropene	12.20	75	37486	1.58	ppb		100
42) trans-1,3-dichloropropene	13.00	75	29463	1.53	ppb		99
43) 1,1,2-trichloroethane	13.30	97	46500	1.40	ppb		96
45) Toluene	13.04	92	46968	1.58	ppb		100
46) Methyl Isobutyl Ketone	12.16	43	21157	1.58	ppb		99
47) Dibromochloromethane	13.98	129	106125	1.41	ppb		99
48) Methyl Butyl Ketone	13.54	43	22988m	1.58	ppb		
49) 1,2-dibromoethane	14.22	107	70898	1.42	ppb		99
50) Tetrachloroethylene	14.07	164	58984	1.42	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111612.D Vial: 3
Acq On : 16 Nov 2009 20:57 Operator: RJP
Sample : A1UT_1.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:00 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

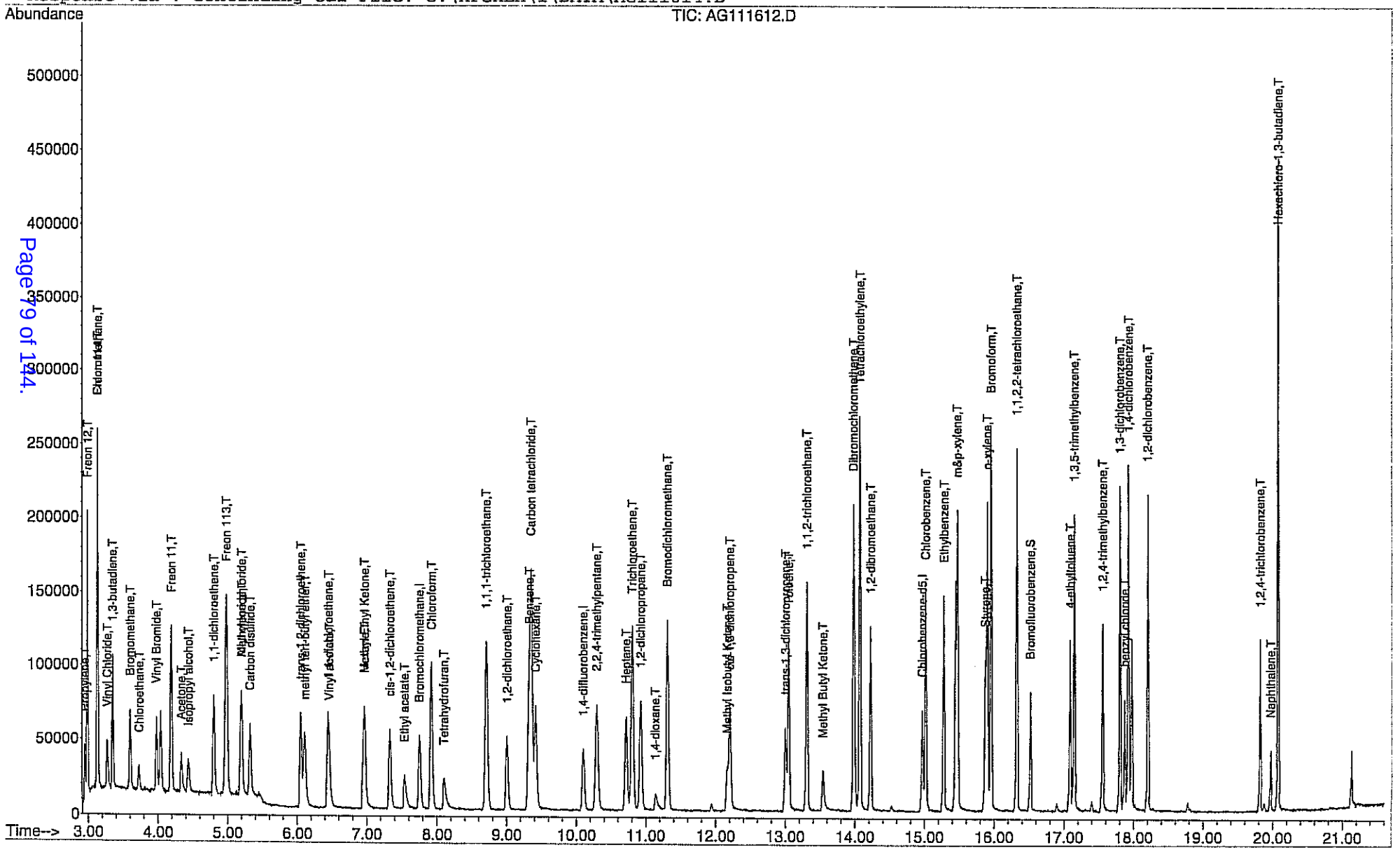
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	81251	1.42	ppb	97
52)	Ethylbenzene	15.27	91	87130	1.56	ppb	99
53)	m&p-xylene	15.46	91	176653	3.31	ppb	100
54)	Styrene	15.86	104	47399	1.59	ppb	100
55)	Bromoform	15.95	173	113941	1.40	ppb	99
56)	o-xylene	15.89	91	104936	1.73	ppb	98
58)	1,1,2,2-tetrachloroethane	16.31	83	94926	1.43	ppb	99
59)	4-ethyltoluene	17.07	105	59175	1.72	ppb	99
60)	1,3,5-trimethylbenzene	17.13	105	81952m	1.63	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	60640	1.79	ppb	96
62)	1,3-dichlorobenzene	17.79	146	84173	1.55	ppb	100
63)	benzyl chloride	17.86	91	39558	1.60	ppb	100
64)	1,4-dichlorobenzene	17.91	146	87419	1.63	ppb	99
65)	1,2-dichlorobenzene	18.19	146	77803	1.54	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	29929	1.51	ppb	99
67)	Naphthalene	19.96	128	24365	1.59	ppb	99
68)	Hexachloro-1,3-butadiene	20.07	225	68631	1.40	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111612.D Vial: 3
Acq On : 16 Nov 2009 20:57 Operator: RJP
Sample : A1UT_1.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:35 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111613.D Vial: 4
Acq On : 16 Nov 2009 21:31 Operator: RJP
Sample : A1UT_1.25 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:10 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17602	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	41201	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	37732	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	18516	1.01	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 101.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	12138	1.18	ppb		92
3) Freon 12	3.00	85	106123	1.22	ppb		98
4) Chloromethane	3.14	50	22922	1.23	ppb		98
5) Freon 114	3.14	85	68679	1.18	ppb		97
6) Vinyl Chloride	3.28	62	19777	1.14	ppb		96
7) 1,3-butadiene	3.36	39	17402	1.19	ppb		72
8) Bromomethane	3.61	94	24599	1.19	ppb		100
9) Chloroethane	3.74	64	7823	1.11	ppb		100
10) Vinyl Bromide	3.99	106	24640	1.18	ppb		99
11) Freon 11	4.20	101	72985	1.16	ppb		99
12) Acetone	4.35	58	7181	1.21	ppb	#	80
13) Isopropyl alcohol	4.45	45	17518	1.24	ppb		97
14) 1,1-dichloroethene	4.81	96	22696	1.15	ppb		93
15) Freon 113	4.99	101	53514	1.21	ppb		100
16) Methylene chloride	5.22	84	19338	1.21	ppb		91
17) Allyl chloride	5.20	41	17760	1.25	ppb		94
18) Carbon disulfide	5.33	76	79120	1.56	ppb		97
19) trans-1,2-dichloroethene	6.06	61	29289	1.19	ppb		88
20) methyl tert-butyl ether	6.12	73	34868	1.19	ppb		90
21) 1,1-dichloroethane	6.45	63	45615	1.22	ppb		99
22) Vinyl acetate	6.48	43	20273	1.22	ppb		98
23) Methyl Ethyl Ketone	6.97	43	36118	1.23	ppb		96
24) cis-1,2-dichloroethene	7.34	61	24875	1.19	ppb		94
25) Hexane	6.97	41	18090	1.24	ppb		96
26) Ethyl acetate	7.55	43	24441	1.26	ppb		97
27) Chloroform	7.93	83	71488	1.18	ppb		97
28) Tetrahydrofuran	8.11	42	9995m	1.30	ppb		
29) 1,2-dichloroethane	9.01	62	39736	1.20	ppb		99
31) 1,1,1-trichloroethane	8.72	97	75426	1.16	ppb		100
32) Cyclohexane	9.43	56	17381	1.19	ppb	#	86
33) Carbon tetrachloride	9.36	117	100192	1.16	ppb		100
34) Benzene	9.32	78	61308	1.25	ppb		94
35) 1,4-dioxane	11.14	88	7415	1.41	ppb		92
36) 2,2,4-trimethylpentane	10.30	57	52341	1.21	ppb		97
37) Heptane	10.72	43	15716	1.18	ppb		94
38) Trichloroethene	10.80	130	43911	1.18	ppb		98
39) 1,2-dichloropropane	10.92	63	23569	1.16	ppb		97
40) Bromodichloromethane	11.31	83	75982	1.18	ppb		100
41) cis-1,3-dichloropropene	12.20	75	30498	1.29	ppb		99
42) trans-1,3-dichloropropene	13.00	75	23247	1.21	ppb		95
43) 1,1,2-trichloroethane	13.30	97	38936	1.17	ppb		97
45) Toluene	13.04	92	36160	1.22	ppb		98
46) Methyl Isobutyl Ketone	12.16	43	18258	1.36	ppb		97
47) Dibromochloromethane	13.97	129	88210	1.17	ppb		99
48) Methyl Butyl Ketone	13.54	43	18356m	1.26	ppb		
49) 1,2-dibromoethane	14.22	107	57600	1.15	ppb		98
50) Tetrachloroethylene	14.06	164	47976	1.15	ppb		99

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111613.D Vial: 4
Acq On : 16 Nov 2009 21:31 Operator: RJP
Sample : A1UT_1.25 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:10 2009 Quant Results File: AN16_1UT.RES

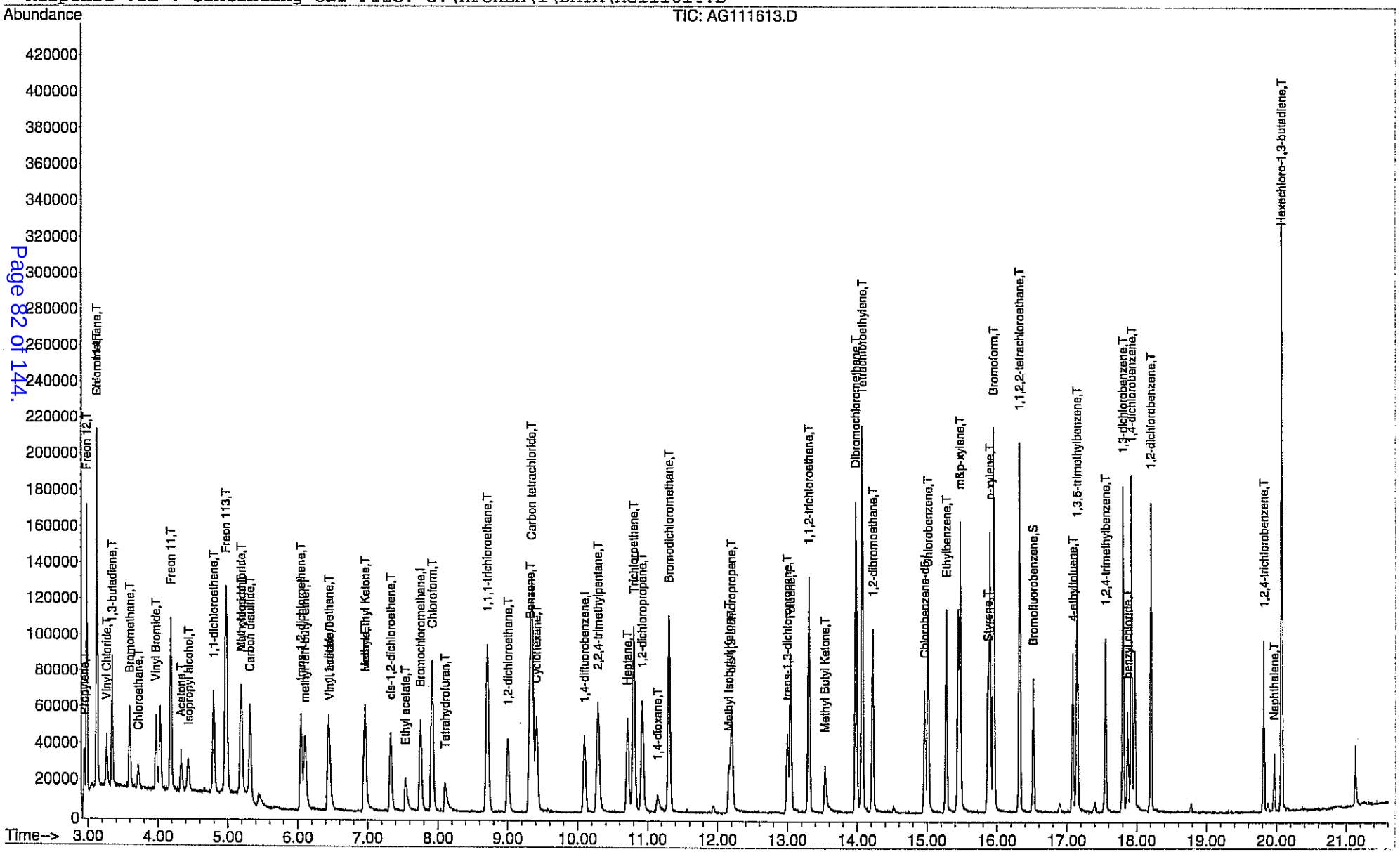
Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	64196	1.12	ppb	98
52)	Ethylbenzene	15.27	91	66804	1.19	ppb	98
53)	m&p-xylene	15.46	91	136070	2.54	ppb	99
54)	Styrene	15.86	104	36345	1.22	ppb	99
55)	Bromoform	15.95	173	94128	1.16	ppb	99
56)	o-xylene	15.89	91	78767	1.30	ppb	96
58)	1,1,2,2-tetrachloroethane	16.31	83	77219	1.16	ppb	99
59)	4-ethyltoluene	17.08	105	44290	1.29	ppb	99
60)	1,3,5-trimethylbenzene	17.14	105	62122m	1.24	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	44501	1.31	ppb	96
62)	1,3-dichlorobenzene	17.79	146	69093	1.27	ppb	99
63)	benzyl chloride	17.86	91	31390	1.27	ppb	100
64)	1,4-dichlorobenzene	17.91	146	68497	1.28	ppb	99
65)	1,2-dichlorobenzene	18.19	146	63704	1.26	ppb	100
66)	1,2,4-trichlorobenzene	19.81	180	24265	1.22	ppb	96
67)	Naphthalene	19.96	128	18750	1.22	ppb	97
68)	Hexachloro-1,3-butadiene	20.07	225	56739	1.16	ppb	98

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111613.D Vial: 4
Acq On : 16 Nov 2009 21:31 Operator: RJP
Sample : A1UT_1.25 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:36 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111614.D Vial: 5
Acq On : 16 Nov 2009 22:04 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:15:48 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17508	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	40334	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	36229	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.51	95	17674	1.00	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 100.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	10274	1.00	ppb		91
3) Freon 12	3.00	85	86760	1.00	ppb		100
4) Chloromethane	3.14	50	18506	1.00	ppb		95
5) Freon 114	3.14	85	57667	1.00	ppb		98
6) Vinyl Chloride	3.28	62	17223	1.00	ppb		97
7) 1,3-butadiene	3.36	39	14510	1.00	ppb		75
8) Bromomethane	3.61	94	20578	1.00	ppb		95
9) Chloroethane	3.74	64	7014	1.00	ppb		96
10) Vinyl Bromide	3.99	106	20721	1.00	ppb		97
11) Freon 11	4.20	101	62630	1.00	ppb		99
12) Acetone	4.35	58	5923	1.00	ppb	#	85
13) Isopropyl alcohol	4.45	45	14091	1.00	ppb	#	40
14) 1,1-dichloroethene	4.81	96	19661	1.00	ppb		91
15) Freon 113	4.99	101	44171	1.00	ppb		97
16) Methylene chloride	5.22	84	15936	1.00	ppb		94
17) Allyl chloride	5.20	41	14186	1.00	ppb		93
18) Carbon disulfide	5.33	76	50579	1.00	ppb		99
19) trans-1,2-dichloroethene	6.06	61	24431	1.00	ppb		88
20) methyl tert-butyl ether	6.12	73	29187	1.00	ppb		90
21) 1,1-dichloroethane	6.45	63	37251	1.00	ppb		100
22) Vinyl acetate	6.48	43	16591	1.00	ppb		98
23) Methyl Ethyl Ketone	6.96	43	29149	1.00	ppb		95
24) cis-1,2-dichloroethene	7.34	61	20795	1.00	ppb		95
25) Hexane	6.98	41	14494	1.00	ppb		95
26) Ethyl acetate	7.55	43	19278	1.00	ppb		97
27) Chloroform	7.93	83	60511	1.00	ppb		97
28) Tetrahydrofuran	8.11	42	7642	1.00	ppb		96
29) 1,2-dichloroethane	9.01	62	33055	1.00	ppb		100
31) 1,1,1-trichloroethane	8.71	97	63645	1.00	ppb		99
32) Cyclohexane	9.42	56	14323	1.00	ppb	#	89
33) Carbon tetrachloride	9.36	117	84765	1.00	ppb		99
34) Benzene	9.32	78	47943	1.00	ppb		95
35) 1,4-dioxane	11.15	88	5153	1.00	ppb		91
36) 2,2,4-trimethylpentane	10.30	57	42331	1.00	ppb		96
37) Heptane	10.71	43	13055	1.00	ppb		98
38) Trichloroethene	10.80	130	36398	1.00	ppb		99
39) 1,2-dichloropropane	10.93	63	19949	1.00	ppb		98
40) Bromodichloromethane	11.31	83	63005	1.00	ppb		98
41) cis-1,3-dichloropropene	12.20	75	23226	1.00	ppb		99
42) trans-1,3-dichloropropene	12.99	75	18849	1.00	ppb		89
43) 1,1,2-trichloroethane	13.30	97	32450	1.00	ppb		98
45) Toluene	13.04	92	28521	1.00	ppb		98
46) Methyl Isobutyl Ketone	12.17	43	12853	1.00	ppb		96
47) Dibromochloromethane	13.97	129	72469	1.00	ppb		100
48) Methyl Butyl Ketone	13.54	43	14050	1.01	ppb		99
49) 1,2-dibromoethane	14.22	107	48102	1.00	ppb		99
50) Tetrachloroethylene	14.06	164	40008	1.00	ppb		97

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111614.D Vial: 5
Acq On : 16 Nov 2009 22:04 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:15:48 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

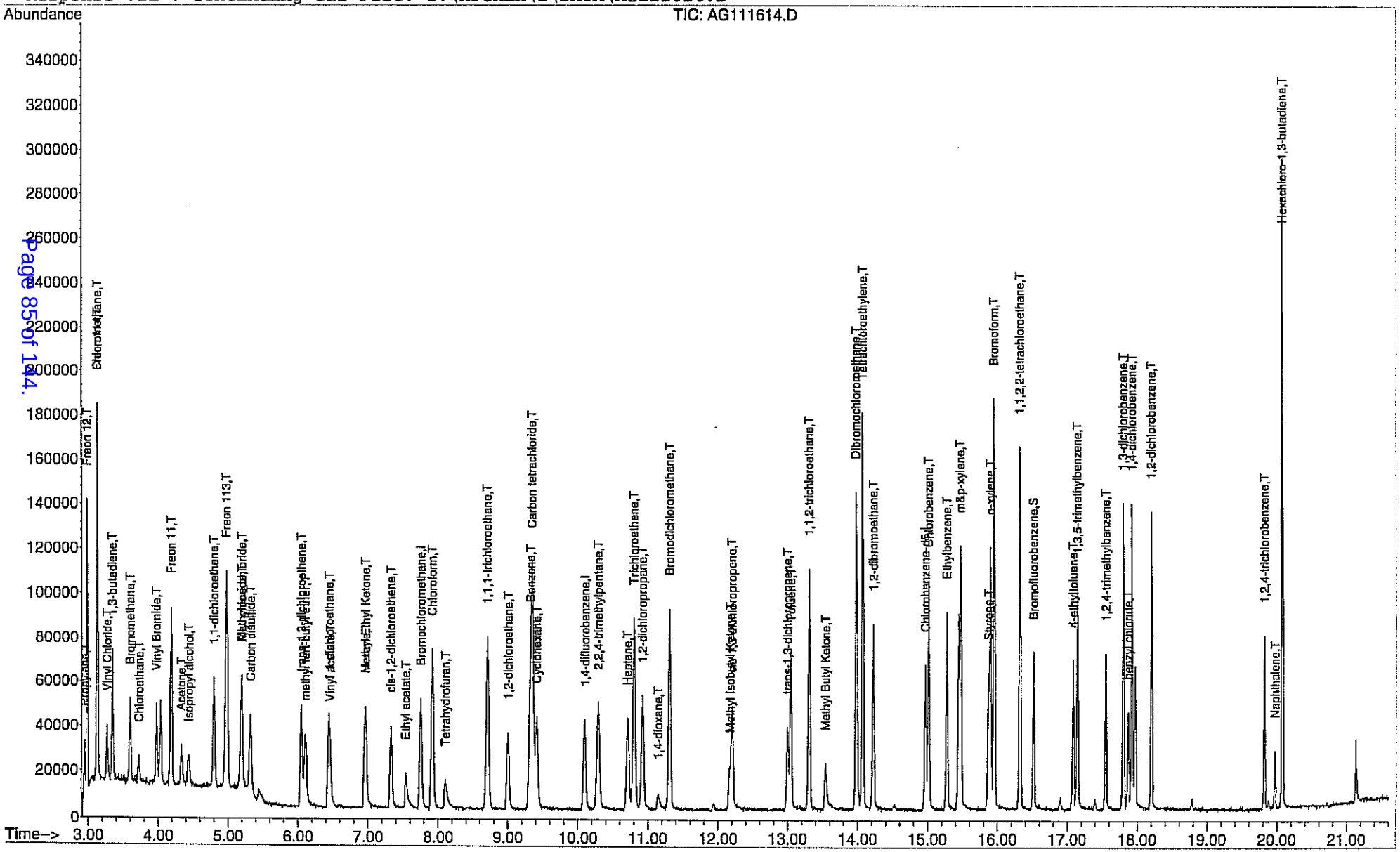
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
51)	Chlorobenzene	15.01	112	54860	1.00 ppb	97
52)	Ethylbenzene	15.27	91	53679	1.00 ppb	99
53)	m&p-xylene	15.46	91	102673	2.00 ppb	100
54)	Styrene	15.86	104	28581	1.00 ppb	100
55)	Bromoform	15.94	173	78116	1.00 ppb	100
56)	o-xylene	15.89	91	58391	1.00 ppb	95
58)	1,1,2,2-tetrachloroethane	16.31	83	64016	1.00 ppb	98
59)	4-ethyltoluene	17.07	105	32982	1.00 ppb	98
60)	1,3,5-trimethylbenzene	17.13	105	48209	1.00 ppb	97
61)	1,2,4-trimethylbenzene	17.54	105	32576	1.00 ppb	95
62)	1,3-dichlorobenzene	17.79	146	52134	1.00 ppb	99
63)	benzyl chloride	17.86	91	23762	1.00 ppb	99
64)	1,4-dichlorobenzene	17.91	146	51519	1.00 ppb	99
65)	1,2-dichlorobenzene	18.19	146	48576	1.00 ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	19116	1.00 ppb	100
67)	Naphthalene	19.96	128	14772	1.00 ppb	97
68)	Hexachloro-1,3-butadiene	20.07	225	47109	1.00 ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111614.D Vial: 5
Acq On : 16 Nov 2009 22:04 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:15 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111615.D Vial: 6
Acq On : 16 Nov 2009 22:36 Operator: RJP
Sample : A1UT_0.75 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:39 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.77	128	17524	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	40682	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	36271	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	17595	0.99	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 99.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	7823	0.76	ppb		84
3) Freon 12	3.00	85	64272	0.74	ppb		100
4) Chloromethane	3.14	50	14657	0.79	ppb		99
5) Freon 114	3.14	85	42259	0.73	ppb		98
6) Vinyl Chloride	3.28	62	12179	0.71	ppb		99
7) 1,3-butadiene	3.36	39	10541	0.73	ppb		78
8) Bromomethane	3.61	94	15319	0.74	ppb		99
9) Chloroethane	3.74	64	4898	0.70	ppb		92
10) Vinyl Bromide	3.99	106	15099	0.73	ppb		97
11) Freon 11	4.20	101	44753	0.71	ppb		99
12) Acetone	4.35	58	4309	0.73	ppb	#	86
13) Isopropyl alcohol	4.45	45	11169	0.79	ppb		95
14) 1,1-dichloroethene	4.81	96	14459m	0.73	ppb		
15) Freon 113	4.99	101	31614	0.72	ppb		97
16) Methylene chloride	5.21	84	12021	0.75	ppb		89
17) Allyl chloride	5.20	41	10884	0.77	ppb		98
18) Carbon disulfide	5.33	76	36126	0.71	ppb		100
19) trans-1,2-dichloroethene	6.06	61	19199	0.79	ppb		84
20) methyl tert-butyl ether	6.12	73	22114	0.76	ppb		90
21) 1,1-dichloroethane	6.45	63	28074	0.75	ppb		100
22) Vinyl acetate	6.48	43	11928	0.72	ppb		100
23) Methyl Ethyl Ketone	6.97	43	20806	0.71	ppb		94
24) cis-1,2-dichloroethene	7.34	61	14891	0.72	ppb		94
25) Hexane	6.97	41	10186	0.70	ppb		93
26) Ethyl acetate	7.55	43	14183	0.74	ppb		97
27) Chloroform	7.93	83	44799	0.74	ppb		99
28) Tetrahydrofuran	8.11	42	5465	0.71	ppb		94
29) 1,2-dichloroethane	9.01	62	23620	0.71	ppb		100
31) 1,1,1-trichloroethane	8.71	97	44970	0.70	ppb		98
32) Cyclohexane	9.42	56	9751	0.67	ppb	#	88
33) Carbon tetrachloride	9.35	117	59253	0.69	ppb		100
34) Benzene	9.32	78	33574	0.69	ppb		97
35) 1,4-dioxane	11.15	88	4635	0.89	ppb		92
36) 2,2,4-trimethylpentane	10.29	57	27568	0.65	ppb		97
37) Heptane	10.72	43	8552	0.65	ppb		100
38) Trichloroethene	10.81	130	24568	0.67	ppb		99
39) 1,2-dichloropropane	10.93	63	13431	0.67	ppb		97
40) Bromodichloromethane	11.31	83	44733	0.70	ppb		99
41) cis-1,3-dichloropropene	12.20	75	16828	0.72	ppb		100
42) trans-1,3-dichloropropene	13.00	75	12834	0.68	ppb		98
43) 1,1,2-trichloroethane	13.30	97	22725	0.69	ppb		100
45) Toluene	13.04	92	18523	0.65	ppb		100
46) Methyl Isobutyl Ketone	12.16	43	10850m	0.84	ppb		
47) Dibromochloromethane	13.98	129	52490	0.72	ppb		98
48) Methyl Butyl Ketone	13.54	43	9454	0.68	ppb		89
49) 1,2-dibromoethane	14.22	107	32953	0.68	ppb		99
50) Tetrachloroethylene	14.06	164	28835	0.72	ppb		93

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111615.D Vial: 6
Acq On : 16 Nov 2009 22:36 Operator: RJP
Sample : A1UT_0.75 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:16:39 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.00	112	36856	0.67	ppb	97
52)	Ethylbenzene	15.27	91	34362	0.64	ppb	100
53)	m&p-xylene	15.46	91	62058	1.21	ppb	99
54)	Styrene	15.86	104	18797	0.66	ppb	96
55)	Bromoform	15.95	173	54033	0.69	ppb	100
56)	o-xylene	15.89	91	34458	0.59	ppb	99
58)	1,1,2,2-tetrachloroethane	16.31	83	43876	0.68	ppb	98
59)	4-ethyltoluene	17.07	105	22241	0.67	ppb	99
60)	1,3,5-trimethylbenzene	17.13	105	28997m	0.60	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	20581	0.63	ppb	96
62)	1,3-dichlorobenzene	17.79	146	33047	0.63	ppb	99
63)	benzyl chloride	17.86	91	16304	0.69	ppb	94
64)	1,4-dichlorobenzene	17.91	146	30923	0.60	ppb	99
65)	1,2-dichlorobenzene	18.19	146	30470	0.63	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	12621	0.66	ppb	98
67)	Naphthalene	19.96	128	11232	0.76	ppb	96
68)	Hexachloro-1,3-butadiene	20.07	225	30280	0.64	ppb	98

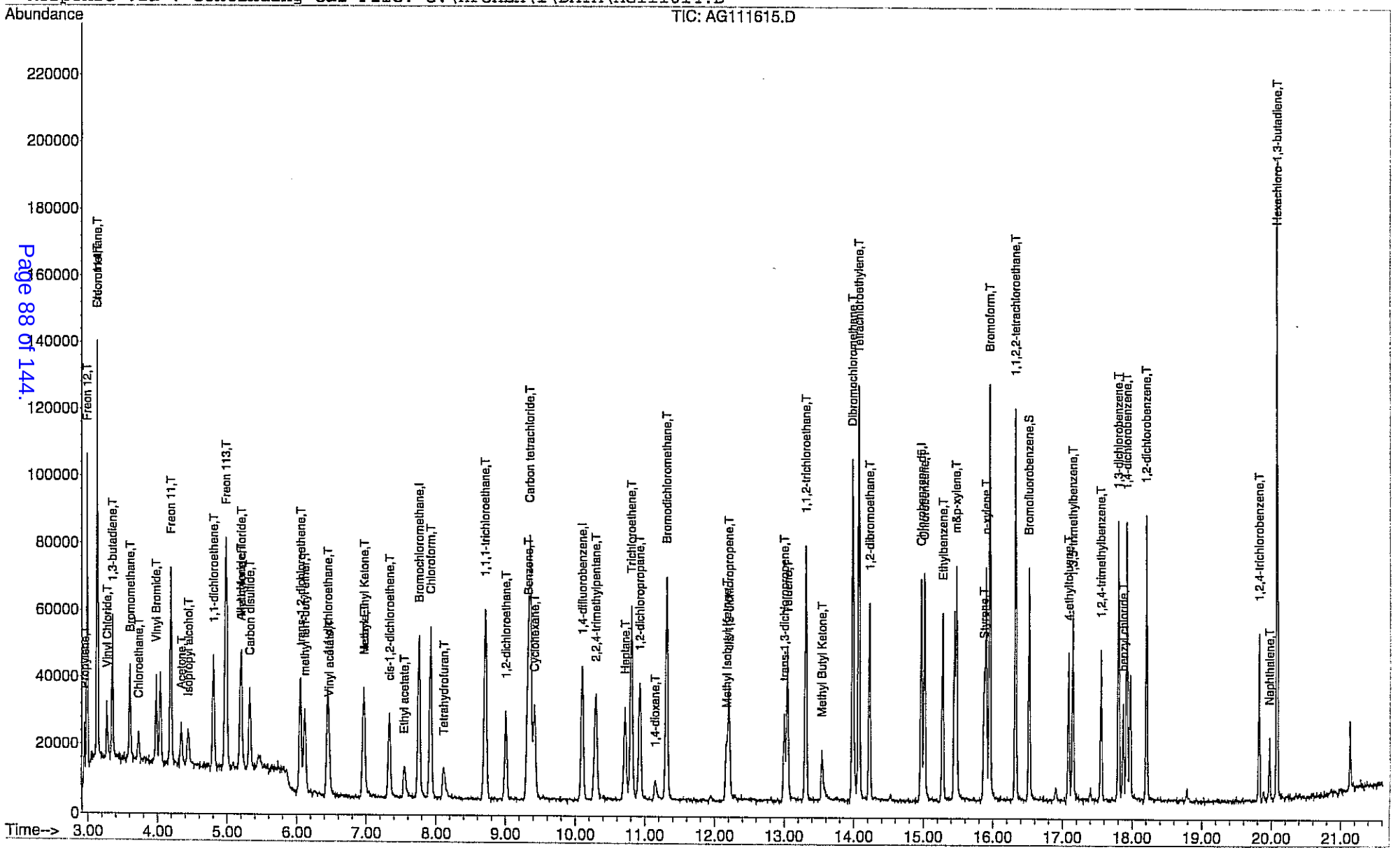
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111615.D
Acq On : 16 Nov 2009 22:36
Sample : A1UT_0.75
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:24 2009

Vial: 6
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111616.D Vial: 7
Acq On : 16 Nov 2009 23:09 Operator: RJP
Sample : A1UT_0.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:03 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17066	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	41681	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	35586	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	16801	0.97	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 97.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	5268	0.53	ppb		92
3) Freon 12	3.00	85	44096	0.52	ppb		99
4) Chloromethane	3.14	50	9462	0.52	ppb		90
5) Freon 114	3.14	85	29585	0.53	ppb		98
6) Vinyl Chloride	3.28	62	8199	0.49	ppb		99
7) 1,3-butadiene	3.36	39	7168	0.51	ppb		70
8) Bromomethane	3.61	94	10290	0.51	ppb		100
9) Chloroethane	3.74	64	3333	0.49	ppb		98
10) Vinyl Bromide	3.99	106	10412	0.52	ppb		99
11) Freon 11	4.20	101	30904	0.51	ppb		98
12) Acetone	4.35	58	2962	0.51	ppb		99
13) Isopropyl alcohol	4.45	45	8028	0.58	ppb	#	40
14) 1,1-dichloroethene	4.81	96	9513	0.50	ppb		96
15) Freon 113	4.99	101	22510	0.52	ppb		99
16) Methylene chloride	5.21	84	8208	0.53	ppb		90
17) Allyl chloride	5.20	41	7484	0.54	ppb		97
18) Carbon disulfide	5.34	76	25155	0.51	ppb		100
19) trans-1,2-dichloroethene	6.06	61	13195	0.55	ppb		90
20) methyl tert-butyl ether	6.13	73	13331	0.47	ppb		88
21) 1,1-dichloroethane	6.45	63	18886	0.52	ppb		99
22) Vinyl acetate	6.48	43	7991	0.49	ppb		100
23) Methyl Ethyl Ketone	6.97	43	13002	0.46	ppb		93
24) cis-1,2-dichloroethene	7.34	61	9765	0.48	ppb		92
25) Hexane	6.98	41	6714	0.48	ppb		96
26) Ethyl acetate	7.55	43	8632	0.46	ppb		97
27) Chloroform	7.93	83	29947	0.51	ppb		99
28) Tetrahydrofuran	8.11	42	3117	0.42	ppb		94
29) 1,2-dichloroethane	9.01	62	16262	0.50	ppb		99
31) 1,1,1-trichloroethane	8.71	97	30787	0.47	ppb		99
32) Cyclohexane	9.41	56	6087	0.41	ppb	#	85
33) Carbon tetrachloride	9.35	117	40906	0.47	ppb		98
34) Benzene	9.32	78	21872	0.44	ppb		97
35) 1,4-dioxane	11.15	88	3267	0.61	ppb		98
36) 2,2,4-trimethylpentane	10.30	57	18010	0.41	ppb		96
37) Heptane	10.71	43	5497	0.41	ppb		99
38) Trichloroethene	10.81	130	16337	0.43	ppb		96
39) 1,2-dichloropropane	10.92	63	8868	0.43	ppb		98
40) Bromodichloromethane	11.31	83	30291	0.47	ppb		100
41) cis-1,3-dichloropropene	12.20	75	9721	0.41	ppb		98
42) trans-1,3-dichloropropene	13.00	75	8412	0.43	ppb		99
43) 1,1,2-trichloroethane	13.30	97	14986	0.45	ppb		99
45) Toluene	13.04	92	11744	0.42	ppb		99
46) Methyl Isobutyl Ketone	12.16	43	9234	0.73	ppb		96
47) Dibromochloromethane	13.97	129	34532	0.49	ppb		99
48) Methyl Butyl Ketone	13.53	43	8223	0.60	ppb		94
49) 1,2-dibromoethane	14.22	107	22058	0.47	ppb		98
50) Tetrachloroethylene	14.06	164	18775	0.48	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111616.D Vial: 7
Acq On : 16 Nov 2009 23:09 Operator: RJP
Sample : A1UT_0.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:03 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

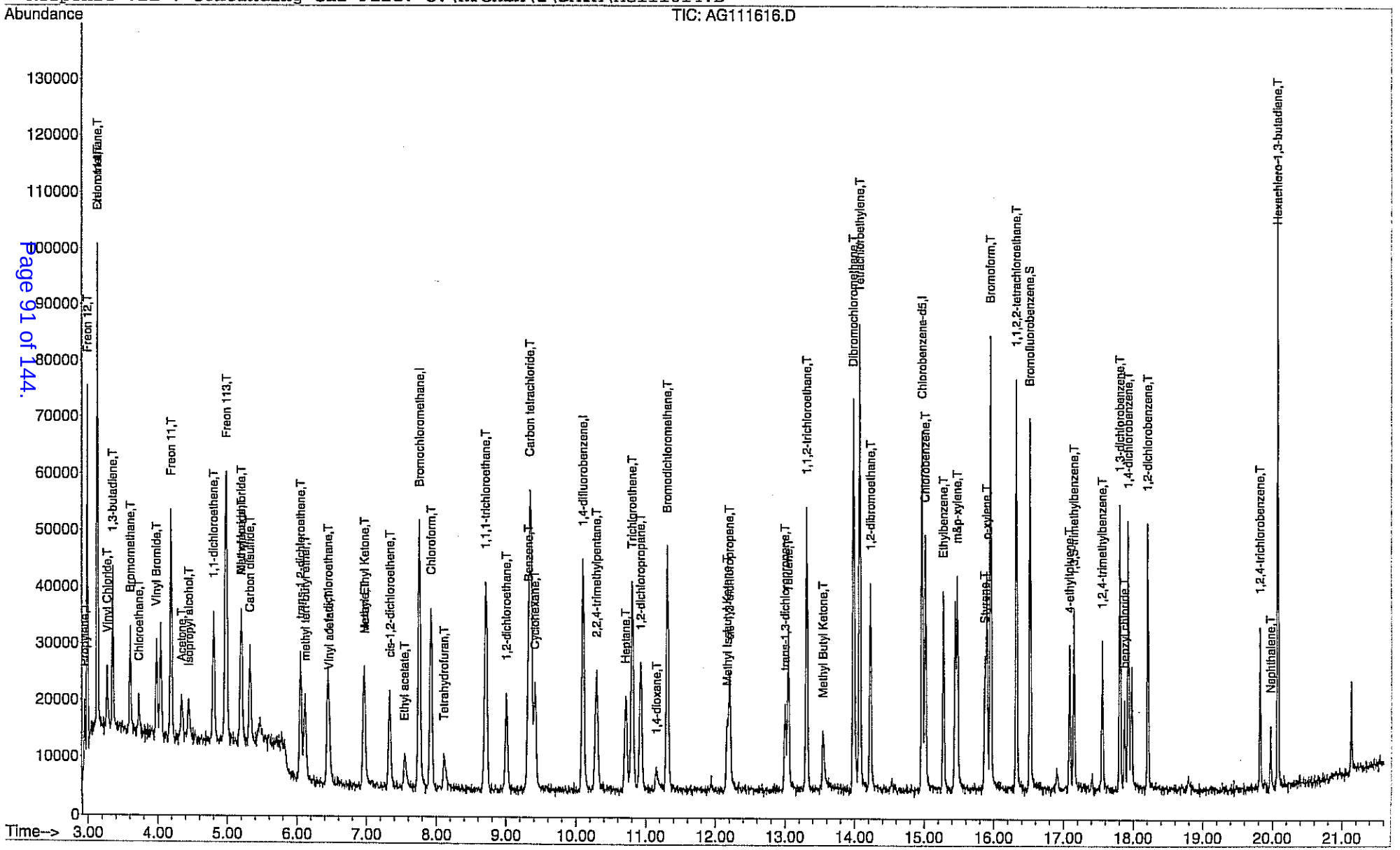
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.00	112	24304	0.45	ppb	97
52)	Ethylbenzene	15.27	91	21158m	0.40	ppb	
53)	m&p-xylene	15.46	91	35749	0.71	ppb	99
54)	Styrene	15.86	104	11280	0.40	ppb	95
55)	Bromoform	15.95	173	35028	0.46	ppb	99
56)	o-xylene	15.89	91	25824m	0.45	ppb	
58)	1,1,2,2-tetrachloroethane	16.31	83	27665	0.44	ppb	99
59)	4-ethyltoluene	17.07	105	13614	0.42	ppb	99
60)	1,3,5-trimethylbenzene	17.14	105	15450	0.33	ppb	99
61)	1,2,4-trimethylbenzene	17.54	105	12485	0.39	ppb	95
62)	1,3-dichlorobenzene	17.79	146	19756	0.39	ppb	98
63)	benzyl chloride	17.86	91	8963	0.38	ppb	98
64)	1,4-dichlorobenzene	17.92	146	18695	0.37	ppb	97
65)	1,2-dichlorobenzene	18.19	146	17228	0.36	ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	7243	0.39	ppb	95
67)	Naphthalene	19.96	128	6231	0.43	ppb	99
68)	Hexachloro-1,3-butadiene	20.06	225	17623	0.38	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111616.D Vial: 7
Acq On : 16 Nov 2009 23:09 Operator: RJP
Sample : A1UT_0.50 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:25 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111617.D Vial: 8
Acq On : 16 Nov 2009 23:41 Operator: RJP
Sample : A1UT_0.30 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:22 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.76	128	17547	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.11	114	40504	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	35426	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	15427	0.89	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 89.00%				
Target Compounds							Qvalue
2) Propylene	2.95	41	3203	0.31	ppb		93
3) Freon 12	3.00	85	27488	0.32	ppb		98
4) Chloromethane	3.14	50	6004	0.32	ppb		87
5) Freon 114	3.14	85	18208	0.32	ppb		98
6) Vinyl Chloride	3.28	62	5194	0.30	ppb		97
7) 1,3-butadiene	3.36	39	4893	0.34	ppb		73
8) Bromomethane	3.61	94	6558	0.32	ppb		100
9) Chloroethane	3.74	64	2035	0.29	ppb		89
10) Vinyl Bromide	3.99	106	6229	0.30	ppb		98
11) Freon 11	4.20	101	18923	0.30	ppb		97
12) Acetone	4.36	58	2032	0.34	ppb	#	86
13) Isopropyl alcohol	4.45	45	5637	0.40	ppb	#	40
14) 1,1-dichloroethene	4.81	96	6250	0.32	ppb	#	86
15) Freon 113	4.99	101	13831	0.31	ppb		98
16) Methylene chloride	5.22	84	4970	0.31	ppb		93
17) Allyl chloride	5.20	41	4713	0.33	ppb		90
18) Carbon disulfide	5.33	76	15723	0.31	ppb		98
19) trans-1,2-dichloroethene	6.06	61	7360	0.30	ppb		89
20) methyl tert-butyl ether	6.13	73	9471	0.32	ppb		90
21) 1,1-dichloroethane	6.45	63	11449	0.31	ppb		98
22) Vinyl acetate	6.47	43	4837	0.29	ppb		92
23) Methyl Ethyl Ketone	6.97	43	7734	0.26	ppb		89
24) cis-1,2-dichloroethene	7.34	61	5869	0.28	ppb		94
25) Hexane	6.98	41	3836	0.26	ppb		92
26) Ethyl acetate	7.56	43	5054	0.26	ppb		93
27) Chloroform	7.93	83	18468	0.30	ppb		97
28) Tetrahydrofuran	8.11	42	2083	0.27	ppb	#	62
29) 1,2-dichloroethane	9.01	62	9813	0.30	ppb		99
31) 1,1,1-trichloroethane	8.72	97	18467	0.29	ppb		98
32) Cyclohexane	9.42	56	3346	0.23	ppb	#	75
33) Carbon tetrachloride	9.35	117	24174	0.28	ppb		94
34) Benzene	9.33	78	14014	0.29	ppb		94
35) 1,4-dioxane	11.16	88	2266	0.44	ppb		93
36) 2,2,4-trimethylpentane	10.30	57	10071	0.24	ppb		93
37) Heptane	10.71	43	3185	0.24	ppb		96
38) Trichloroethene	10.81	130	9058	0.25	ppb		98
39) 1,2-dichloropropane	10.92	63	5230	0.26	ppb		94
40) Bromodichloromethane	11.31	83	17736	0.28	ppb		95
41) cis-1,3-dichloropropene	12.20	75	6007	0.26	ppb		97
42) trans-1,3-dichloropropene	13.00	75	5184	0.27	ppb		96
43) 1,1,2-trichloroethane	13.30	97	8940	0.27	ppb		99
45) Toluene	13.04	92	7541m	0.27	ppb		
46) Methyl Isobutyl Ketone	12.17	43	5892	0.47	ppb		98
47) Dibromochloromethane	13.98	129	20780	0.29	ppb		99
48) Methyl Butyl Ketone	13.54	43	3839	0.28	ppb		92
49) 1,2-dibromoethane	14.22	107	12253	0.26	ppb		96
50) Tetrachloroethylene	14.06	164	21935	0.28	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111617.D Vial: 8
Acq On : 16 Nov 2009 23:41 Operator: RJP
Sample : A1UT_0.30 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:22 2009 Quant Results File: AN16_1UT.RES

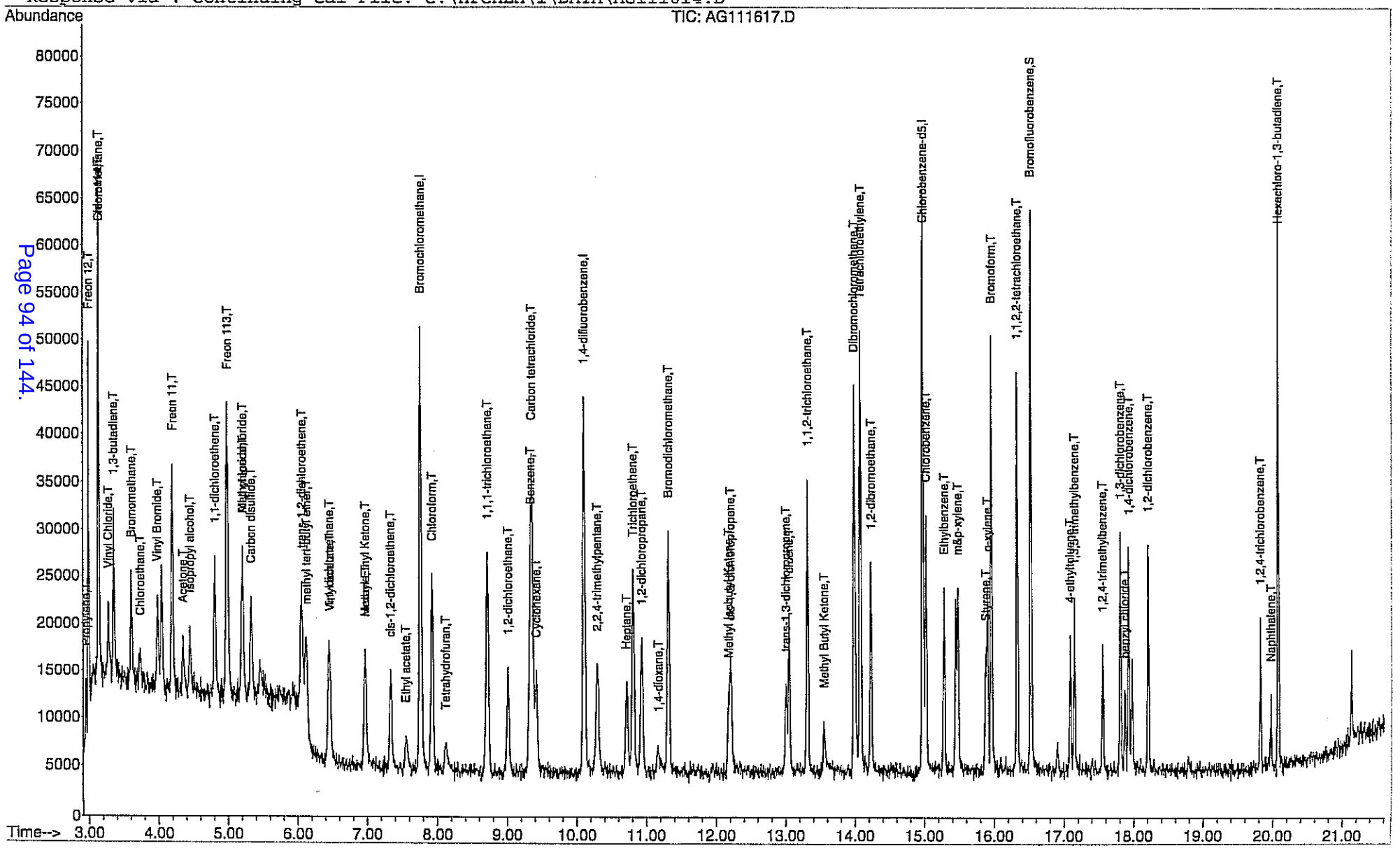
Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51)	Chlorobenzene	15.01	112	14157	0.26	ppb	96
52)	Ethylbenzene	15.27	91	11966	0.23	ppb	98
53)	m&p-xylene	15.46	91	18915	0.38	ppb	97
54)	Styrene	15.86	104	6007	0.21	ppb	97
55)	Bromoform	15.94	173	19485	0.26	ppb	98
56)	o-xylene	15.89	91	13860m	0.24	ppb	
58)	1,1,2,2-tetrachloroethane	16.31	83	15864	0.25	ppb	98
59)	4-ethyltoluene	17.07	105	7115	0.22	ppb	98
60)	1,3,5-trimethylbenzene	17.13	105	8996m	0.19	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	6447	0.20	ppb	96
62)	1,3-dichlorobenzene	17.79	146	10206	0.20	ppb	97
63)	benzyl chloride	17.86	91	4662	0.20	ppb	99
64)	1,4-dichlorobenzene	17.91	146	9431m	0.19	ppb	
65)	1,2-dichlorobenzene	18.19	146	9572m	0.20	ppb	
66)	1,2,4-trichlorobenzene	19.81	180	3965	0.21	ppb	95
67)	Naphthalene	19.96	128	4125	0.29	ppb	92
68)	Hexachloro-1,3-butadiene	20.06	225	9732	0.21	ppb	96

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111617.D Vial: 8
Acq On : 16 Nov 2009 23:41 Operator: RJP
Sample : A1UT_0.30 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:37 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111618.D Vial: 9
Acq On : 17 Nov 2009 00:13 Operator: RJP
Sample : A1UT_0.15 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:51 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.77	128	16510	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.10	114	38385	1.00	ppb		0.00
44) Chlorobenzene-d5	14.96	117	34106	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	14142	0.85	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 85.00%				
Target Compounds							Qvalue
2) Propylene	2.96	41	1877	0.19	ppb		100
3) Freon 12	3.00	85	16015	0.20	ppb		97
4) Chloromethane	3.14	50	3408	0.20	ppb		86
5) Freon 114	3.14	85	10342	0.19	ppb		98
6) Vinyl Chloride	3.29	62	3004	0.18	ppb		96
7) 1,3-butadiene	3.36	39	2534m	0.19	ppb		
8) Bromomethane	3.61	94	3853	0.20	ppb		97
9) Chloroethane	3.74	64	1299	0.20	ppb		83
10) Vinyl Bromide	3.99	106	3603	0.18	ppb		95
11) Freon 11	4.20	101	10532	0.18	ppb		94
13) Isopropyl alcohol	4.45	45	3488m	0.26	ppb		
14) 1,1-dichloroethene	4.82	96	3601	0.19	ppb	#	85
15) Freon 113	4.99	101	7647	0.18	ppb		96
16) Methylene chloride	5.22	84	2926	0.19	ppb		92
17) Allyl chloride	5.21	41	2732	0.20	ppb		90
18) Carbon disulfide	5.34	76	8999	0.19	ppb		94
19) trans-1,2-dichloroethene	6.06	61	4261	0.18	ppb		96
20) methyl tert-butyl ether	6.13	73	4461	0.16	ppb		82
21) 1,1-dichloroethane	6.45	63	6549	0.19	ppb		97
22) Vinyl acetate	6.47	43	2539	0.16	ppb		87
23) Methyl Ethyl Ketone	6.97	43	3725	0.14	ppb		87
24) cis-1,2-dichloroethene	7.34	61	3390	0.17	ppb		99
25) Hexane	6.97	41	2244	0.16	ppb	#	81
26) Ethyl acetate	7.56	43	2861	0.16	ppb		96
27) Chloroform	7.93	83	10355	0.18	ppb		99
28) Tetrahydrofuran	8.11	42	790	0.11	ppb	#	29
29) 1,2-dichloroethane	9.01	62	5655	0.18	ppb		99
31) 1,1,1-trichloroethane	8.71	97	10544	0.17	ppb		99
32) Cyclohexane	9.42	56	1476	0.11	ppb	#	57
33) Carbon tetrachloride	9.35	117	14175	0.18	ppb		100
34) Benzene	9.33	78	7258	0.16	ppb		95
36) 2,2,4-trimethylpentane	10.28	57	5860	0.15	ppb		98
37) Heptane	10.72	43	1945	0.16	ppb		93
38) Trichloroethene	10.80	130	5236	0.15	ppb		98
39) 1,2-dichloropropane	10.92	63	2837	0.15	ppb		95
40) Bromodichloromethane	11.31	83	9885	0.16	ppb		98
41) cis-1,3-dichloropropene	12.20	75	3130	0.14	ppb		99
42) trans-1,3-dichloropropene	13.00	75	2761	0.15	ppb		98
43) 1,1,2-trichloroethane	13.31	97	5215	0.17	ppb		99
45) Toluene	13.04	92	3620	0.13	ppb		93
47) Dibromochloromethane	13.98	129	11513	0.17	ppb		98
49) 1,2-dibromoethane	14.22	107	7013	0.15	ppb		99
50) Tetrachloroethylene	14.07	164	6261	0.17	ppb		93
51) Chlorobenzene	15.00	112	7847	0.15	ppb		94
52) Ethylbenzene	15.27	91	6490	0.13	ppb		98
53) m&p-xylene	15.47	91	10300	0.21	ppb		98
54) Styrene	15.86	104	3238	0.12	ppb		99

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111618.D Vial: 9
Acq On : 17 Nov 2009 00:13 Operator: RJP
Sample : A1UT_0.15 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:17:51 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
55)	Bromoform	15.94	173	10840	0.15	ppb	99
56)	o-xylene	15.90	91	7407m	0.13	ppb	
58)	1,1,2,2-tetrachloroethane	16.31	83	8877	0.15	ppb	97
59)	4-ethyltoluene	17.07	105	3829	0.12	ppb	96
60)	1,3,5-trimethylbenzene	17.13	105	4582m	0.10	ppb	
61)	1,2,4-trimethylbenzene	17.54	105	3928m	0.13	ppb	
62)	1,3-dichlorobenzene	17.79	146	5501	0.11	ppb	96
63)	benzyl chloride	17.86	91	3426m	0.15	ppb	
65)	1,2-dichlorobenzene	18.19	146	5275m	0.12	ppb	
66)	1,2,4-trichlorobenzene	19.81	180	2102m	0.12	ppb	
67)	Naphthalene	19.96	128	2808	0.20	ppb	98
68)	Hexachloro-1,3-butadiene	20.06	225	5278	0.12	ppb	96

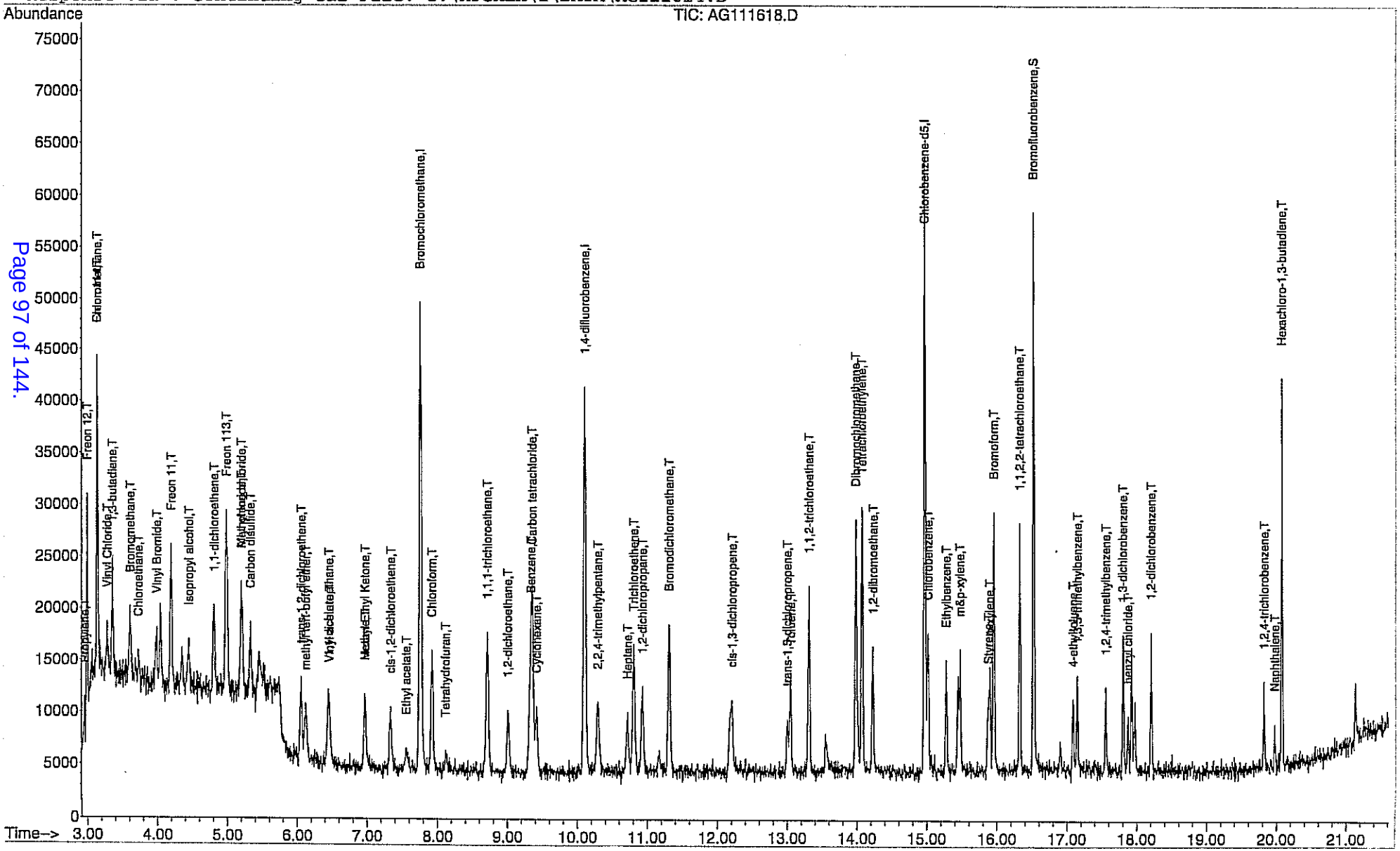
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111618.D
Acq On : 17 Nov 2009 00:13
Sample : A1UT_0.15
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:28 2009

Vial: 9
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111619.D Vial: 10
Acq On : 17 Nov 2009 00:46 Operator: RJP
Sample : A1UT_0.10 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:18:12 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

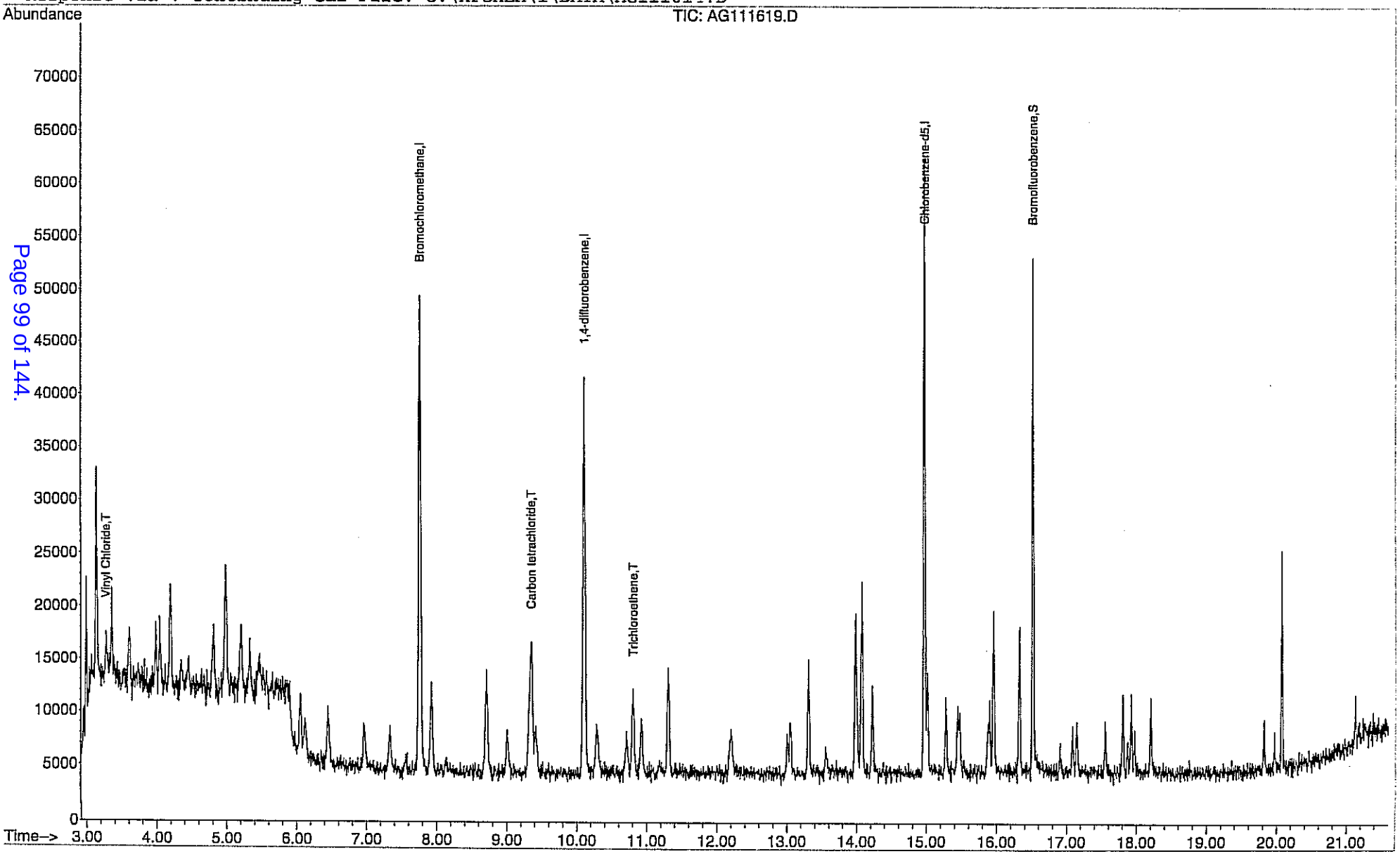
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.76	128	16692	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	37239	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	31393	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	12427	0.81	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 81.00%			
Target Compounds						Qvalue
6) Vinyl Chloride	3.29	62	2104	0.13	ppb	99
33) Carbon tetrachloride	9.36	117	9401	0.12	ppb	98
38) Trichloroethene	10.80	130	3311	0.10	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111619.D Vial: 10
Acq On : 17 Nov 2009 00:46 Operator: RJP
Sample : A1UT_0.10 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:29 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111621.D Vial: 12
Acq On : 17 Nov 2009 1:50 Operator: RJP
Sample : A1UT_0.04 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 17 09:18:47 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:15:39 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.76	128	16363	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	36985	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	31904	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	12098	0.78	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 78.00%			
Target Compounds						Qvalue
33) Carbon tetrachloride	9.35	117	5592	0.07	ppb	95
38) Trichloroethene	10.80	130	1885	0.06	ppb	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

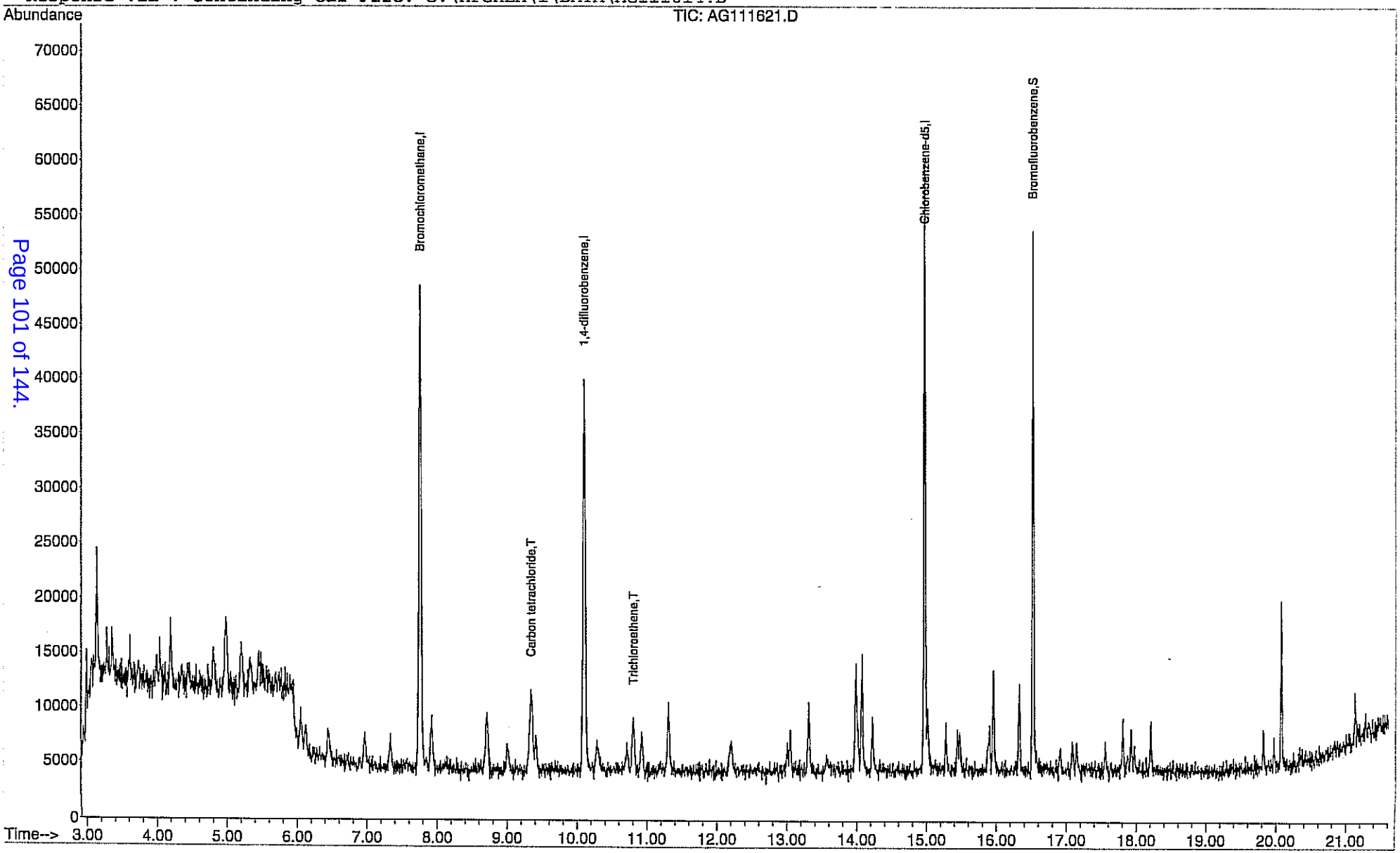
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG111621.D
Acq On : 17 Nov 2009 1:50
Sample : A1UT_0.04
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 17 9:30 2009

Vial: 12
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Continuing Cal File: C:\HPCHEM\1\DATA\AG111614.D



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CALIBRATION VERIFICATION

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AG122203.D Vial: 3
Acq On : 22 Dec 2009 9:10 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	109	0.00
2	T	Propylene	0.613	0.539	12.1	100	0.00
3	T	Freon 12	5.150	4.941	4.1	109	0.00
4	T	Chloromethane	1.120	0.929	17.1	96	0.00
5	T	Freon 114	3.394	2.741	19.2	91	0.00
6	T	Vinyl Chloride	1.060	0.795	25.0	88	0.00
7	T	1,3-butadiene	0.847	0.695	17.9	91	0.00
8	T	Bromomethane	1.212	0.941	22.4	87	0.00
9	T	Chloroethane	0.393	0.318	19.1	87	0.00
10	T	Vinyl Bromide	1.202	0.979	18.6	90	0.00
11	T	Freon 11	3.580	2.946	17.7	90	0.00
12	T	Acetone	0.346	0.305	11.8	98	0.00
13	T	Isopropyl alcohol	0.943	0.777	17.6	105	0.00
14	T	1,1-dichloroethene	1.141	0.932	18.3	90	0.00
15	T	Freon 113	2.577	2.115	17.9	91	0.00
16	T	Methylene chloride	0.991	0.769	22.4	92	0.00
17	T	Allyl chloride	0.872	0.739	15.3	99	0.00
18	T	Carbon disulfide	3.157	2.502	20.7	94	0.00
19	T	trans-1,2-dichloroethene	1.456	1.415	2.8	110	0.00
20	T	methyl tert-butyl ether	1.710	1.512	11.6	99	0.00
21	T	1,1-dichloroethane	2.201	2.172	1.3	111	0.00
22	T	Vinyl acetate	0.962	0.820	14.8	94	0.00
23	T	Methyl Ethyl Ketone	1.630	1.634	-0.2	107	0.00
24	T	cis-1,2-dichloroethene	1.182	1.132	4.2	104	0.00
25	T	Hexane	0.832	0.879	-5.6	116	0.00
26	T	Ethyl acetate	1.109	1.010	8.9	100	0.00
27	T	Chloroform	3.504	3.577	-2.1	113	0.00
28	T	Tetrahydrofuran	0.422	0.394	6.6	98	0.00
29	T	1,2-dichloroethane	1.908	1.884	1.3	109	0.00
30	I	1,4-difluorobenzene	1.000	1.000	0.0	99	0.00
31	T	1,1,1-trichloroethane	1.555	1.711	-10.0	107	0.00
32	T	Cyclohexane	0.333	0.391	-17.4	109	0.00
33	T	Carbon tetrachloride	2.281	2.371	-3.9	112	0.00
34	T	Benzene	1.194	1.353	-13.3	113	0.00
35	T	1,4-dioxane	0.158	0.122	22.8	95	0.00
36	T	2,2,4-trimethylpentane	0.996	1.066	-7.0	101	0.00
37	T	Heptane	0.313	0.335	-7.0	103	0.00
38	T	Trichloroethene	0.898	0.982	-9.4	108	0.00
39	T	1,2-dichloropropane	0.465	0.508	-9.2	102	0.00
40	T	Bromodichloromethane	1.529	1.710	-11.8	109	0.00
41	T	cis-1,3-dichloropropene	0.571	0.582	-1.9	100	0.00
42	T	trans-1,3-dichloropropene	0.459	0.465	-1.3	99	0.00
43	T	1,1,2-trichloroethane	0.782	0.879	-12.4	108	0.00
44	I	Chlorobenzene-d5	1.000	1.000	0.0	99	0.00
45	T	Toluene	0.767	0.794	-3.5	100	0.00
46	T	Methyl Isobutyl Ketone	0.439	0.319	27.3	89	0.00
47	T	Dibromochloromethane	1.979	2.037	-2.9	101	0.00
48	T	Methyl Butyl Ketone	0.402	0.325	19.2	83	0.00
49	T	1,2-dibromoethane	1.268	1.358	-7.1	101	0.00
50	T	Tetrachloroethylene	1.083	1.201	-10.9	107	0.00
51	T	Chlorobenzene	1.438	1.522	-5.8	99	0.00
52	T	Ethylbenzene	1.398	1.434	-2.6	96	0.00
53	T	m&p-xylene	1.292	1.424	-10.2	99	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AG122203.D Vial: 3
Acq On : 22 Dec 2009 9:10 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54	T	Styrene	0.748	0.743	0.7	93	0.00
55	T	Bromoform	2.031	2.046	-0.7	94	0.00
56	T	o-xylene	1.604	1.623	-1.2	100	0.00
57	S	Bromofluorobenzene	0.461	0.490	-6.3	99	0.00
58	T	1,1,2,2-tetrachloroethane	1.661	1.752	-5.5	98	0.00
59	T	4-ethyltoluene	0.899	0.763	15.1	83	0.00
60	T	1,3,5-trimethylbenzene	1.186	1.197	-0.9	89	0.00
61	T	1,2,4-trimethylbenzene	0.863	0.816	5.4	90	0.00
62	T	1,3-dichlorobenzene	1.314	1.380	-5.0	95	0.00
63	T	benzyl chloride	0.634	0.522	17.7	79	0.00
64	T	1,4-dichlorobenzene	1.283	1.332	-3.8	93	0.00
65	T	1,2-dichlorobenzene	1.221	1.270	-4.0	94	0.00
66	T	1,2,4-trichlorobenzene	0.483	0.560	-15.9	105	0.00
67	T	Naphthalene	0.433	0.420	3.0	102	0.00
68	T	Hexachloro-1,3-butadiene	1.149	1.490	-29.7	113	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122203.D Vial: 3
Acq On : 22 Dec 2009 9:10 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 09:32:02 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.75	128	19077	1.00	ppb	-0.01
30) 1,4-difluorobenzene	10.09	114	39972	1.00	ppb	0.00
44) Chlorobenzene-d5	14.95	117	35792	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	17531	1.06	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 106.00%			
Target Compounds						Qvalue
2) Propylene	2.95	41	10281	0.88	ppb	99
3) Freon 12	2.99	85	94265	0.96	ppb	98
4) Chloromethane	3.13	50	17723	0.83	ppb	95
5) Freon 114	3.14	85	52292	0.81	ppb	99
6) Vinyl Chloride	3.27	62	15162	0.75	ppb	100
7) 1,3-butadiene	3.35	39	13260	0.82	ppb	95
8) Bromomethane	3.60	94	17944	0.78	ppb	99
9) Chloroethane	3.73	64	6068	0.81	ppb	98
10) Vinyl Bromide	3.98	106	18681	0.81	ppb	97
11) Freon 11	4.19	101	56202	0.82	ppb	100
12) Acetone	4.34	58	5826	0.88	ppb	99
13) Isopropyl alcohol	4.44	45	14814m	0.82	ppb	
14) 1,1-dichloroethene	4.80	96	17787	0.82	ppb	99
15) Freon 113	4.98	101	40341	0.82	ppb	98
16) Methylene chloride	5.20	84	14677	0.78	ppb	98
17) Allyl chloride	5.19	41	14097	0.85	ppb	93
18) Carbon disulfide	5.32	76	47740	0.79	ppb	100
19) trans-1,2-dichloroethene	6.05	61	26990	0.97	ppb	99
20) methyl tert-butyl ether	6.11	73	28837	0.88	ppb	94
21) 1,1-dichloroethane	6.44	63	41426	0.99	ppb	100
22) Vinyl acetate	6.47	43	15652	0.85	ppb	97
23) Methyl Ethyl Ketone	6.95	43	31173	1.00	ppb	97
24) cis-1,2-dichloroethene	7.33	61	21598	0.96	ppb	99
25) Hexane	6.97	41	16764	1.06	ppb	92
26) Ethyl acetate	7.53	43	19269	0.91	ppb	99
27) Chloroform	7.92	83	68240	1.02	ppb	100
28) Tetrahydrofuran	8.09	42	7513	0.93	ppb	96
29) 1,2-dichloroethane	9.00	62	35932	0.99	ppb	100
31) 1,1,1-trichloroethane	8.70	97	68389	1.10	ppb	100
32) Cyclohexane	9.41	56	15639	1.17	ppb	97
33) Carbon tetrachloride	9.34	117	94770	1.04	ppb	99
34) Benzene	9.31	78	54068	1.13	ppb	92
35) 1,4-dioxane	11.14	88	4890	0.77	ppb	91
36) 2,2,4-trimethylpentane	10.28	57	42629	1.07	ppb	96
37) Heptane	10.70	43	13387	1.07	ppb	98
38) Trichloroethene	10.80	130	39261	1.09	ppb	98
39) 1,2-dichloropropane	10.91	63	20296	1.09	ppb	98
40) Bromodichloromethane	11.30	83	68365	1.12	ppb	99
41) cis-1,3-dichloropropene	12.19	75	23277	1.02	ppb	97
42) trans-1,3-dichloropropene	12.98	75	18582	1.01	ppb	87
43) 1,1,2-trichloroethane	13.29	97	35151	1.12	ppb	98
45) Toluene	13.03	92	28433	1.04	ppb	100
46) Methyl Isobutyl Ketone	12.16	43	11401m	0.73	ppb	
47) Dibromochloromethane	13.97	129	72909	1.03	ppb	99
48) Methyl Butyl Ketone	13.53	43	11630m	0.81	ppb	
49) 1,2-dibromoethane	14.21	107	48616	1.07	ppb	99
50) Tetrachloroethylene	14.06	164	43974	1.11	ppb	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122203.D Vial: 3
Acq On : 22 Dec 2009 9:10 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 09:32:02 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

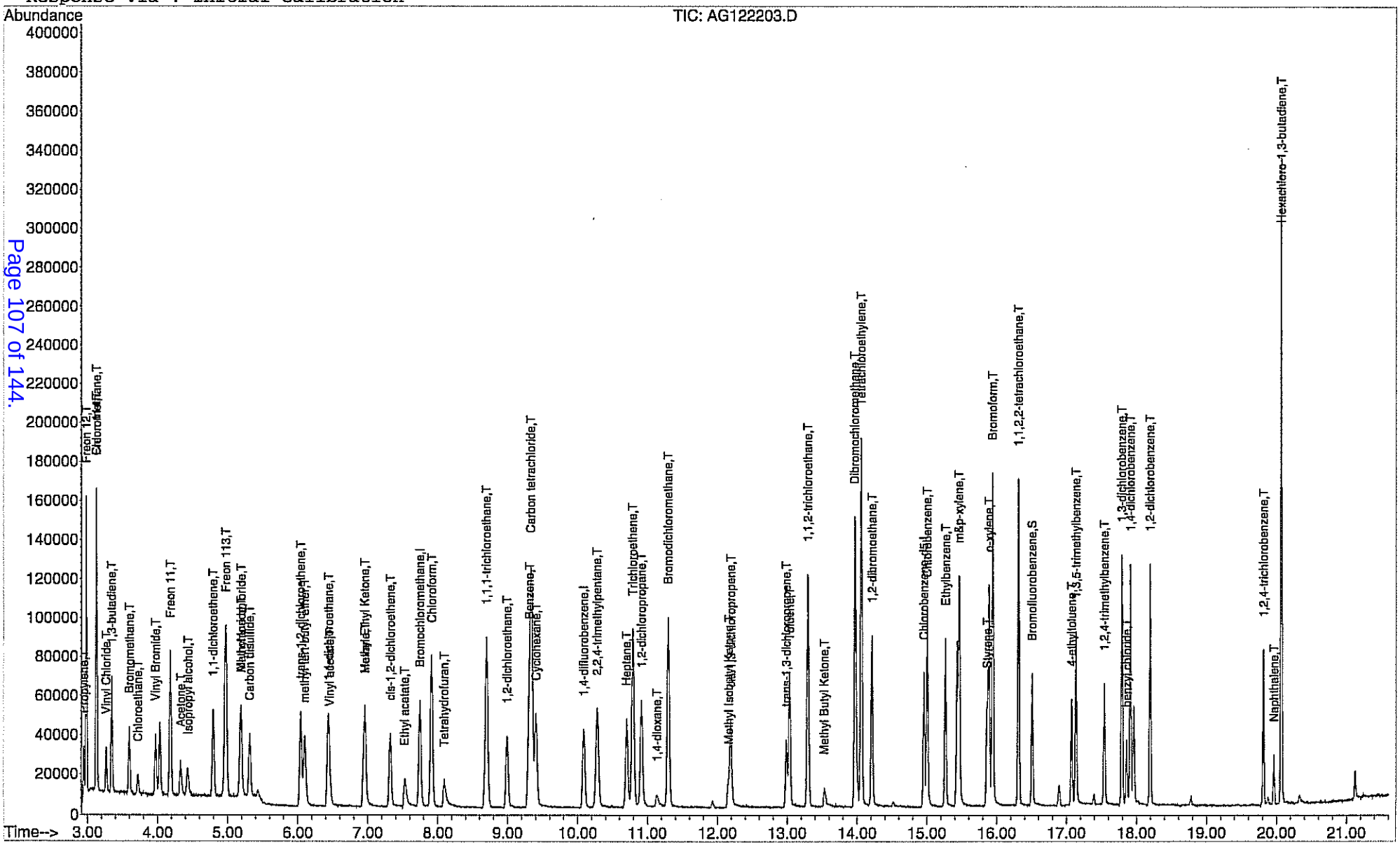
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
51)	Chlorobenzene	15.00	112	54477	1.06 ppb	99
52)	Ethylbenzene	15.26	91	51308	1.03 ppb	98
53)	m&p-xylene	15.46	91	101947	2.20 ppb	98
54)	Styrene	15.86	104	26595	0.99 ppb	100
55)	Bromoform	15.94	173	73217	1.01 ppb	100
56)	o-xylene	15.89	91	58100	1.01 ppb	98
58)	1,1,2,2-tetrachloroethane	16.31	83	62701	1.05 ppb	97
59)	4-ethyltoluene	17.07	105	27306	0.85 ppb	99
60)	1,3,5-trimethylbenzene	17.13	105	42837	1.01 ppb	99
61)	1,2,4-trimethylbenzene	17.53	105	29206	0.95 ppb	100
62)	1,3-dichlorobenzene	17.79	146	49384	1.05 ppb	98
63)	benzyl chloride	17.86	91	18680	0.82 ppb	100
64)	1,4-dichlorobenzene	17.91	146	47687	1.04 ppb	99
65)	1,2-dichlorobenzene	18.19	146	45443	1.04 ppb	99
66)	1,2,4-trichlorobenzene	19.81	180	20039	1.16 ppb	98
67)	Naphthalene	19.96	128	15040	0.97 ppb	99
68)	Hexachloro-1,3-butadiene	20.06	225	53340m	1.30 ppb	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122203.D Vial: 3
Acq On : 22 Dec 2009 9:10 Operator: RJP
Sample : A1UT_1.0 Inst : MSD #1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:26 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Initial Calibration



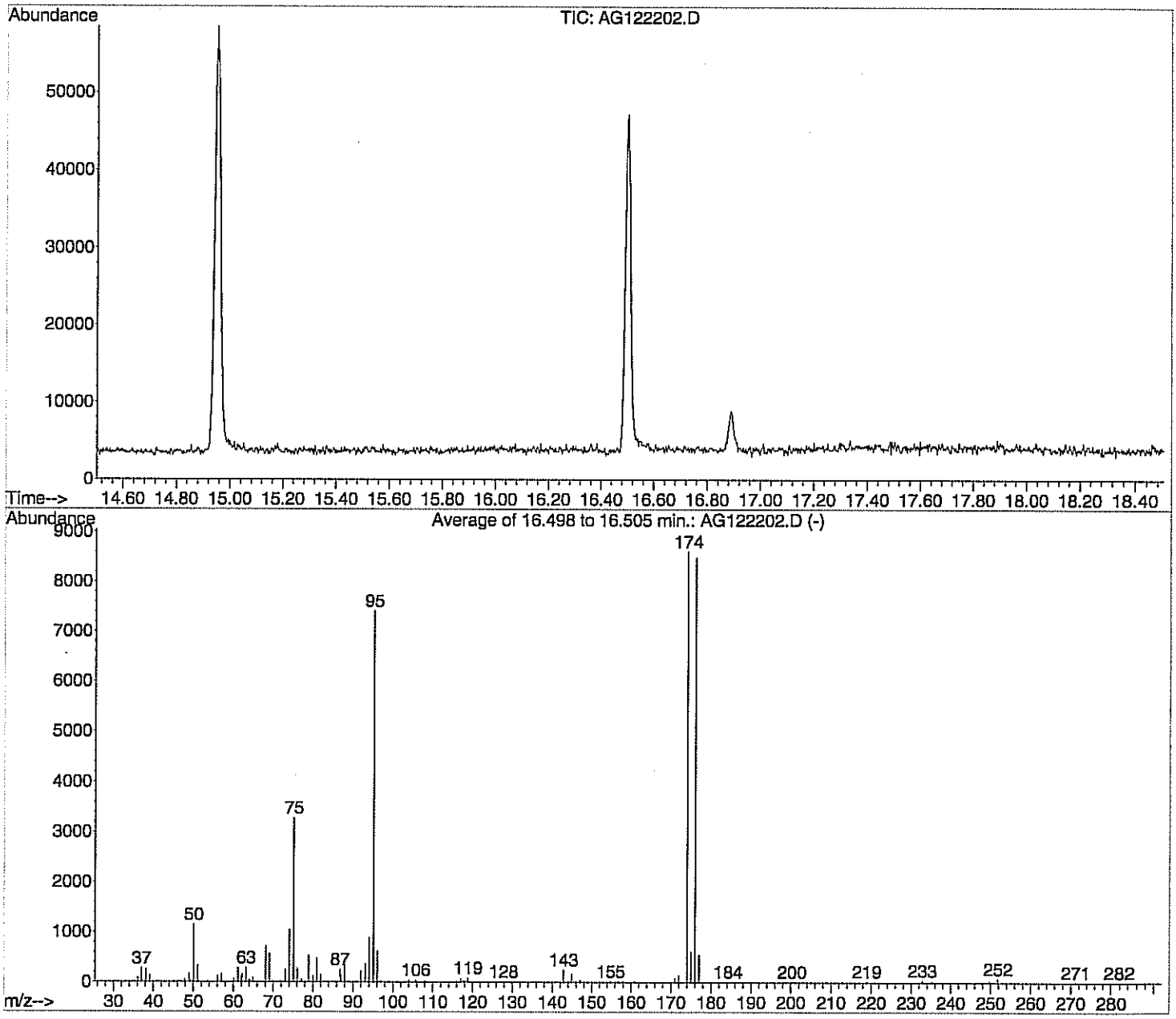
GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW DATA

Data File : C:\HPCHEM\1\DATA\AG122202.D
Acq On : 22 Dec 2009 8:22
Sample : BFB1UT
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration

Vial: 2
Operator: RJP
Inst : MSD #1
Multiplr: 1.00



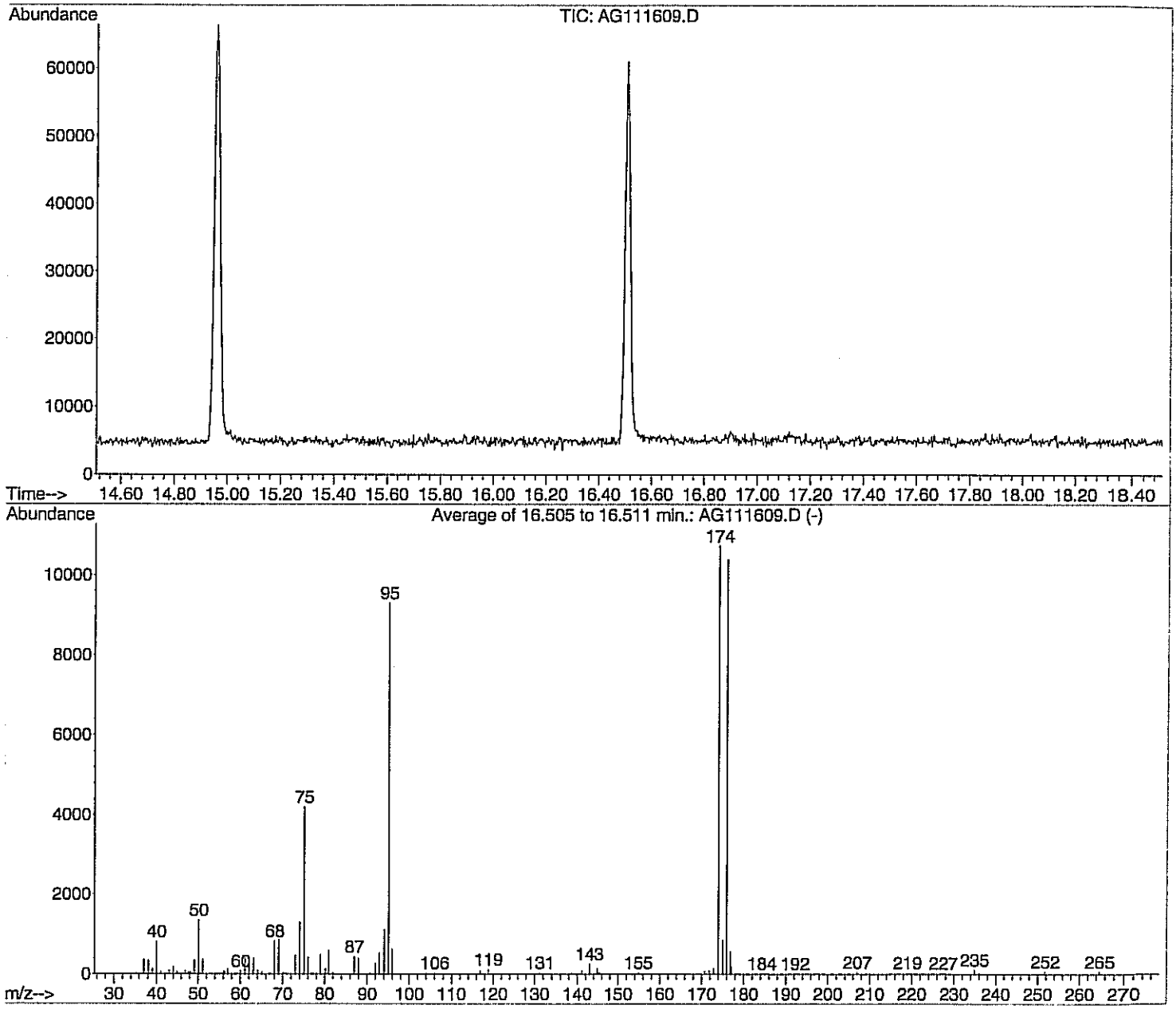
Spectrum Information: Average of 16.498 to 16.505 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	15.5	1150	PASS
75	95	30	66	44.2	3278	PASS
95	95	100	100	100.0	7415	PASS
96	95	5	9	8.3	618	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	116.1	8610	PASS
175	174	4	9	7.0	604	PASS
176	174	95	101	98.6	8486	PASS
177	176	5	9	6.5	549	PASS

BFB

Data File : C:\HPCHEM\1\DATA\AG111609.D
Acq On : 16 Nov 2009 19:13
Sample : BFB1UT
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration

Vial: 8
Operator: RJP
Inst : MSD #1
Multiplr: 1.00



Spectrum Information: Average of 16.505 to 16.511 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	14.5	1352	PASS
75	95	30	66	45.1	4199	PASS
95	95	100	100	100.0	9304	PASS
96	95	5	9	6.8	630	PASS
173	174	0.00	2	1.4	146	PASS
174	95	50	120	115.4	10740	PASS
175	174	4	9	8.0	854	PASS
176	174	95	101	96.7	10390	PASS
177	176	5	9	5.4	563	PASS

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

RAW QC DATA

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **MB1UT-122209** SampType: **MBLK** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	< 0.15	0.15									
1,1,2,2-Tetrachloroethane	< 0.15	0.15									
1,1,2-Trichloroethane	< 0.15	0.15									
1,1-Dichloroethane	< 0.15	0.15									
1,1-Dichloroethene	< 0.15	0.15									
1,2,4-Trichlorobenzene	< 0.15	0.15									
1,2,4-Trimethylbenzene	< 0.15	0.15									
1,2-Dibromoethane	< 0.15	0.15									
1,2-Dichlorobenzene	< 0.15	0.15									
1,2-Dichloroethane	< 0.15	0.15									
1,2-Dichloropropane	< 0.15	0.15									
1,3,5-Trimethylbenzene	< 0.15	0.15									
1,3-butadiene	< 0.15	0.15									
1,3-Dichlorobenzene	< 0.15	0.15									
1,4-Dichlorobenzene	< 0.15	0.15									
1,4-Dioxane	< 0.30	0.30									
2,2,4-trimethylpentane	< 0.15	0.15									
4-ethyltoluene	< 0.15	0.15									
Acetone	< 0.30	0.30									
Allyl chloride	< 0.15	0.15									
Benzene	< 0.15	0.15									
Benzyl chloride	< 0.15	0.15									
Bromodichloromethane	< 0.15	0.15									
Bromoform	< 0.15	0.15									
Bromomethane	< 0.15	0.15									
Carbon disulfide	< 0.15	0.15									
Carbon tetrachloride	< 0.040	0.040									
Chlorobenzene	< 0.15	0.15									
Chloroethane	< 0.15	0.15									

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **MB1UT-122209** SampType: **MBLK** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39116**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	< 0.15	0.15									
Chloromethane	< 0.15	0.15									
cis-1,2-Dichloroethene	< 0.15	0.15									
cis-1,3-Dichloropropene	< 0.15	0.15									
Cyclohexane	< 0.15	0.15									
Dibromochloromethane	< 0.15	0.15									
Ethyl acetate	< 0.25	0.25									
Ethylbenzene	< 0.15	0.15									
Freon 11	< 0.15	0.15									
Freon 113	< 0.15	0.15									
Freon 114	< 0.15	0.15									
Freon 12	< 0.15	0.15									
Heptane	< 0.15	0.15									
Hexachloro-1,3-butadiene	< 0.15	0.15									
Hexane	< 0.15	0.15									
Isopropyl alcohol	< 0.15	0.15									
m&p-Xylene	< 0.30	0.30									
Methyl Butyl Ketone	< 0.30	0.30									
Methyl Ethyl Ketone	< 0.30	0.30									
Methyl Isobutyl Ketone	< 0.30	0.30									
Methyl tert-butyl ether	< 0.15	0.15									
Methylene chloride	< 0.15	0.15									
o-Xylene	< 0.15	0.15									
Propylene	< 0.15	0.15									
Styrene	< 0.15	0.15									
Tetrachloroethylene	< 0.15	0.15									
Tetrahydrofuran	< 0.15	0.15									
Toluene	< 0.15	0.15									
trans-1,2-Dichloroethene	< 0.15	0.15									
trans-1,3-Dichloropropene	< 0.15	0.15									
Trichloroethene	< 0.040	0.040									

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **MB1UT-122209**	SampType: **MBLK**	TestCode: **0.25CT-TCE-**	Units: **ppbV**	Prep Date:		RunNo: **3136**	
Client ID: **ZZZZZ**	Batch ID: **R3136**	TestNo: **TO-15**		Analysis Date: **12/22/2009**		SeqNo: **39116**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	< 0.15	0.15									
Vinyl Bromide	< 0.15	0.15									
Vinyl chloride	< 0.040	0.040									
Surr: Bromofluorobenzene	0.7300	0	1	0	73.0	70	130				

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122205.D Vial: 5
Acq On : 22 Dec 2009 10:19 Operator: RJP
Sample : MB1UT-122209 Inst : MSD #1
Misc : MB1UT-122209 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:40:47 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

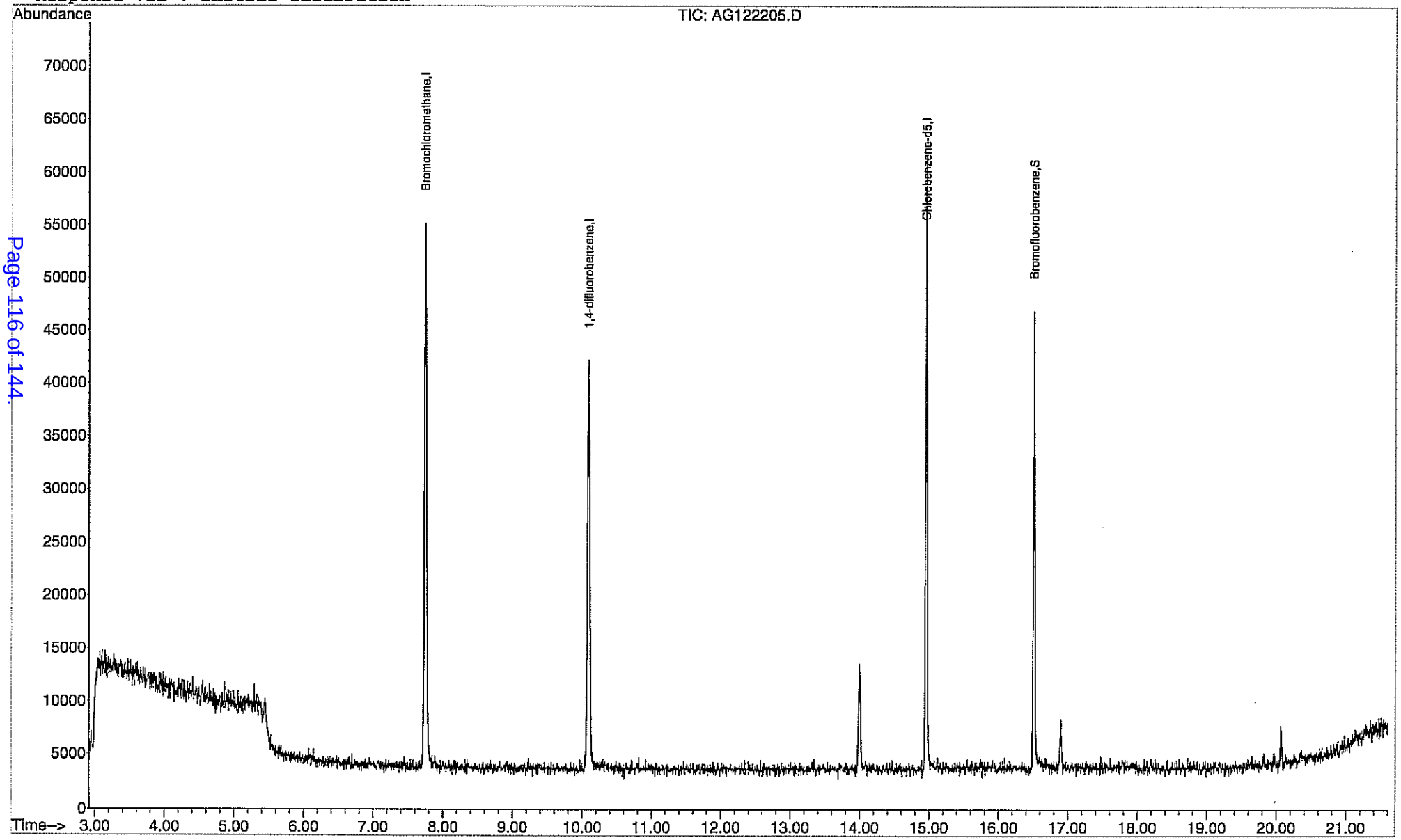
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.76	128	19166	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.09	114	39757	1.00	ppb	-0.01
44) Chlorobenzene-d5	14.95	117	33879	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.50	95	11329	0.73	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 73.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122205.D Vial: 5
Acq On : 22 Dec 2009 10:19 Operator: RJP
Sample : MB1UT-122209 Inst : MSD #1
Misc : MB1UT-122209 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:40 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Initial Calibration



CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **LCS1UT-122209** SampType: **LCS** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39117**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	1.040	0.15	1	0	104	70	130				
1,1,2,2-Tetrachloroethane	1.020	0.15	1	0	102	70	130				
1,1,2-Trichloroethane	1.060	0.15	1	0	106	70	130				
1,1-Dichloroethane	0.9900	0.15	1	0	99.0	70	130				
1,1-Dichloroethene	0.7800	0.15	1	0	78.0	70	130				
1,2,4-Trichlorobenzene	0.9600	0.15	1	0	96.0	70	130				
1,2,4-Trimethylbenzene	0.9200	0.15	1	0	92.0	70	130				
1,2-Dibromoethane	1.020	0.15	1	0	102	70	130				
1,2-Dichlorobenzene	0.9600	0.15	1	0	96.0	70	130				
1,2-Dichloroethane	0.9900	0.15	1	0	99.0	70	130				
1,2-Dichloropropane	1.050	0.15	1	0	105	70	130				
1,3,5-Trimethylbenzene	0.9800	0.15	1	0	98.0	70	130				
1,3-butadiene	0.8400	0.15	1	0	84.0	70	130				
1,3-Dichlorobenzene	0.9700	0.15	1	0	97.0	70	130				
1,4-Dichlorobenzene	0.9700	0.15	1	0	97.0	70	130				
1,4-Dioxane	0.8700	0.30	1	0	87.0	70	130				
2,2,4-trimethylpentane	1.070	0.15	1	0	107	70	130				
4-ethyltoluene	0.8200	0.15	1	0	82.0	70	130				
Acetone	0.7900	0.30	1	0	79.0	70	130				
Allyl chloride	0.8300	0.15	1	0	83.0	70	130				
Benzene	1.100	0.15	1	0	110	70	130				
Benzyl chloride	0.7600	0.15	1	0	76.0	70	130				
Bromodichloromethane	1.070	0.15	1	0	107	70	130				
Bromoform	0.9400	0.15	1	0	94.0	70	130				
Bromomethane	0.7800	0.15	1	0	78.0	70	130				
Carbon disulfide	0.7700	0.15	1	0	77.0	70	130				
Carbon tetrachloride	1.000	0.040	1	0	100	70	130				
Chlorobenzene	1.000	0.15	1	0	100	70	130				
Chloroethane	0.8300	0.15	1	0	83.0	70	130				

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: LCS1UT-122209	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39117

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	1.000	0.15	1	0	100	70	130				
Chloromethane	0.8200	0.15	1	0	82.0	70	130				
cis-1,2-Dichloroethene	0.9400	0.15	1	0	94.0	70	130				
cis-1,3-Dichloropropene	1.030	0.15	1	0	103	70	130				
Cyclohexane	1.130	0.15	1	0	113	70	130				
Dibromochloromethane	0.9600	0.15	1	0	96.0	70	130				
Ethyl acetate	0.9100	0.25	1	0	91.0	70	130				
Ethylbenzene	0.9700	0.15	1	0	97.0	70	130				
Freon 11	0.8100	0.15	1	0	81.0	70	130				
Freon 113	0.8200	0.15	1	0	82.0	70	130				
Freon 114	0.7900	0.15	1	0	79.0	70	130				
Freon 12	0.9100	0.15	1	0	91.0	70	130				
Heptane	1.020	0.15	1	0	102	70	130				
Hexachloro-1,3-butadiene	1.100	0.15	1	0	110	70	130				
Hexane	1.060	0.15	1	0	106	70	130				
Isopropyl alcohol	0.7500	0.15	1	0	75.0	70	130				
m&p-Xylene	2.080	0.30	2	0	104	70	130				
Methyl Butyl Ketone	0.8500	0.30	1	0	85.0	70	130				
Methyl Ethyl Ketone	0.9900	0.30	1	0	99.0	70	130				
Methyl Isobutyl Ketone	0.8200	0.30	1	0	82.0	70	130				
Methyl tert-butyl ether	0.9100	0.15	1	0	91.0	70	130				
Methylene chloride	0.7700	0.15	1	0	77.0	70	130				
o-Xylene	0.9700	0.15	1	0	97.0	70	130				
Propylene	0.9600	0.15	1	0	96.0	70	130				
Styrene	0.9600	0.15	1	0	96.0	70	130				
Tetrachloroethylene	1.050	0.15	1	0	105	70	130				
Tetrahydrofuran	0.9400	0.15	1	0	94.0	70	130				
Toluene	1.010	0.15	1	0	101	70	130				
trans-1,2-Dichloroethene	0.9800	0.15	1	0	98.0	70	130				
trans-1,3-Dichloropropene	0.9900	0.15	1	0	99.0	70	130				
Trichloroethene	1.040	0.040	1	0	104	70	130				

Qualifiers:

- . Results reported are not blank corrected
- J Analyte detected at or below quantitation limits
- S Spike Recovery outside accepted recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: LCS1UT-122209	SampType: LCS	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39117

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl acetate	0.9300	0.15	1	0	93.0	70	130				
Vinyl Bromide	0.8100	0.15	1	0	81.0	70	130				
Vinyl chloride	0.7400	0.040	1	0	74.0	70	130				

Sample ID: LCS1UTD-122209	SampType: LCSD	TestCode: 0.25CT-TCE-	Units: ppbV	Prep Date:	RunNo: 3136
Client ID: ZZZZZ	Batch ID: R3136	TestNo: TO-15		Analysis Date: 12/22/2009	SeqNo: 39118

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.9800	0.15	1	0	98.0	70	130	1.04	5.94	30	
1,1,2,2-Tetrachloroethane	0.8900	0.15	1	0	89.0	70	130	1.02	13.6	30	
1,1,2-Trichloroethane	0.9700	0.15	1	0	97.0	70	130	1.06	8.87	30	
1,1-Dichloroethane	0.8500	0.15	1	0	85.0	70	130	0.99	15.2	30	
1,1-Dichloroethene	0.7300	0.15	1	0	73.0	70	130	0.78	6.62	30	
1,2,4-Trichlorobenzene	0.9200	0.15	1	0	92.0	70	130	0.96	4.26	30	
1,2,4-Trimethylbenzene	0.8400	0.15	1	0	84.0	70	130	0.92	9.09	30	
1,2-Dibromoethane	0.9400	0.15	1	0	94.0	70	130	1.02	8.16	30	
1,2-Dichlorobenzene	0.9000	0.15	1	0	90.0	70	130	0.96	6.45	30	
1,2-Dichloroethane	0.8800	0.15	1	0	88.0	70	130	0.99	11.8	30	
1,2-Dichloropropane	0.9400	0.15	1	0	94.0	70	130	1.05	11.1	30	
1,3,5-Trimethylbenzene	0.8600	0.15	1	0	86.0	70	130	0.98	13.0	30	
1,3-butadiene	0.7600	0.15	1	0	76.0	70	130	0.84	10.0	30	
1,3-Dichlorobenzene	0.9100	0.15	1	0	91.0	70	130	0.97	6.38	30	
1,4-Dichlorobenzene	0.9100	0.15	1	0	91.0	70	130	0.97	6.38	30	
1,4-Dioxane	0.9900	0.30	1	0	99.0	70	130	0.87	12.9	30	
2,2,4-trimethylpentane	0.9000	0.15	1	0	90.0	70	130	1.07	17.3	30	
4-ethyltoluene	0.7500	0.15	1	0	75.0	70	130	0.82	8.92	30	
Acetone	0.8700	0.30	1	0	87.0	70	130	0.79	9.64	30	
Allyl chloride	0.9100	0.15	1	0	91.0	70	130	0.83	9.20	30	
Benzene	0.8800	0.15	1	0	88.0	70	130	1.1	22.2	30	
Benzyl chloride	0.7500	0.15	1	0	75.0	70	130	0.76	1.32	30	

Qualifiers:

.	Results reported are not blank corrected	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected at or below quantitation limits	ND	Not Detected at the Reporting Limit	R	RPD outside accepted recovery limits
S	Spike Recovery outside accepted recovery limits				

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **LCS1UTD-122209** SampType: **LCSD** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	0.9900	0.15	1	0	99.0	70	130	1.07	7.77	30	
Bromoform	0.8900	0.15	1	0	89.0	70	130	0.94	5.46	30	
Bromomethane	0.7200	0.15	1	0	72.0	70	130	0.78	8.00	30	
Carbon disulfide	1.110	0.15	1	0	111	70	130	0.77	36.2	30	R
Carbon tetrachloride	0.9600	0.040	1	0	96.0	70	130	1	4.08	30	
Chlorobenzene	0.9000	0.15	1	0	90.0	70	130	1	10.5	30	
Chloroethane	0.7200	0.15	1	0	72.0	70	130	0.83	14.2	30	
Chloroform	0.9100	0.15	1	0	91.0	70	130	1	9.42	30	
Chloromethane	0.7600	0.15	1	0	76.0	70	130	0.82	7.59	30	
cis-1,2-Dichloroethene	0.8300	0.15	1	0	83.0	70	130	0.94	12.4	30	
cis-1,3-Dichloropropene	0.9800	0.15	1	0	98.0	70	130	1.03	4.98	30	
Cyclohexane	0.9500	0.15	1	0	95.0	70	130	1.13	17.3	30	
Dibromochloromethane	0.8800	0.15	1	0	88.0	70	130	0.96	8.70	30	
Ethyl acetate	0.7700	0.25	1	0	77.0	70	130	0.91	16.7	30	
Ethylbenzene	0.8700	0.15	1	0	87.0	70	130	0.97	10.9	30	
Freon 11	0.7700	0.15	1	0	77.0	70	130	0.81	5.06	30	
Freon 113	1.240	0.15	1	0	124	70	130	0.82	40.8	30	R
Freon 114	0.7500	0.15	1	0	75.0	70	130	0.79	5.19	30	
Freon 12	0.9200	0.15	1	0	92.0	70	130	0.91	1.09	30	
Heptane	0.8600	0.15	1	0	86.0	70	130	1.02	17.0	30	
Hexachloro-1,3-butadiene	1.090	0.15	1	0	109	70	130	1.1	0.913	30	
Hexane	0.8600	0.15	1	0	86.0	70	130	1.06	20.8	30	
Isopropyl alcohol	0.8200	0.15	1	0	82.0	70	130	0.75	8.92	30	
m&p-Xylene	1.880	0.30	2	0	94.0	70	130	2.08	10.1	30	
Methyl Butyl Ketone	1.080	0.30	1	0	108	70	130	0.85	23.8	30	
Methyl Ethyl Ketone	0.8500	0.30	1	0	85.0	70	130	0.99	15.2	30	
Methyl Isobutyl Ketone	1.020	0.30	1	0	102	70	130	0.82	21.7	30	
Methyl tert-butyl ether	0.7400	0.15	1	0	74.0	70	130	0.91	20.6	30	
Methylene chloride	1.180	0.15	1	0	118	70	130	0.77	42.1	30	R
o-Xylene	0.8500	0.15	1	0	85.0	70	130	0.97	13.2	30	
Propylene	0.7900	0.15	1	0	79.0	70	130	0.96	19.4	30	

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

CLIENT: Arcadis
Work Order: C0912043
Project: Utica - Soil Vapor

ANALYTICAL QC SUMMARY REPORT

TestCode: 0.25CT-TCE-VC

Sample ID: **LCS1UTD-122209** SampType: **LCSD** TestCode: **0.25CT-TCE-** Units: **ppbV** Prep Date: RunNo: **3136**
Client ID: **ZZZZZ** Batch ID: **R3136** TestNo: **TO-15** Analysis Date: **12/22/2009** SeqNo: **39118**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	0.8500	0.15	1	0	85.0	70	130	0.96	12.2	30	
Tetrachloroethylene	0.9800	0.15	1	0	98.0	70	130	1.05	6.90	30	
Tetrahydrofuran	0.7400	0.15	1	0	74.0	70	130	0.94	23.8	30	
Toluene	0.8800	0.15	1	0	88.0	70	130	1.01	13.8	30	
trans-1,2-Dichloroethene	0.7800	0.15	1	0	78.0	70	130	0.98	22.7	30	
trans-1,3-Dichloropropene	0.8800	0.15	1	0	88.0	70	130	0.99	11.8	30	
Trichloroethene	0.9600	0.040	1	0	96.0	70	130	1.04	8.00	30	
Vinyl acetate	0.7100	0.15	1	0	71.0	70	130	0.93	26.8	30	
Vinyl Bromide	0.7400	0.15	1	0	74.0	70	130	0.81	9.03	30	
Vinyl chloride	0.7300	0.040	1	0	73.0	70	130	0.74	1.36	30	

Qualifiers:
. Results reported are not blank corrected
J Analyte detected at or below quantitation limits
S Spike Recovery outside accepted recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122204.D Vial: 4
Acq On : 22 Dec 2009 9:46 Operator: RJP
Sample : LCS1UT-122209 Inst : MSD #1
Misc : LCS1UT-122209 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:08:31 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.75	128	19489	1.00	ppb		0.00
30) 1,4-difluorobenzene	10.09	114	42580	1.00	ppb		0.00
44) Chlorobenzene-d5	14.95	117	39454	1.00	ppb		0.00
System Monitoring Compounds							
57) Bromofluorobenzene	16.50	95	19408	1.07	ppb		0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 107.00%				
Target Compounds							Qvalue
2) Propylene	2.95	41	11517	0.96	ppb		98
3) Freon 12	2.99	85	91314	0.91	ppb		98
4) Chloromethane	3.13	50	17991	0.82	ppb		95
5) Freon 114	3.14	85	52338	0.79	ppb		100
6) Vinyl Chloride	3.27	62	15303	0.74	ppb		98
7) 1,3-butadiene	3.35	39	13799	0.84	ppb		99
8) Bromomethane	3.60	94	18374	0.78	ppb		98
9) Chloroethane	3.73	64	6343	0.83	ppb		98
10) Vinyl Bromide	3.98	106	19016	0.81	ppb		96
11) Freon 11	4.19	101	56430	0.81	ppb		99
12) Acetone	4.34	58	5342	0.79	ppb	#	76
13) Isopropyl alcohol	4.43	45	13867	0.75	ppb	#	100
14) 1,1-dichloroethene	4.80	96	17403	0.78	ppb		97
15) Freon 113	4.98	101	41217	0.82	ppb		99
16) Methylene chloride	5.20	84	14914	0.77	ppb		98
17) Allyl chloride	5.19	41	14085	0.83	ppb		95
18) Carbon disulfide	5.32	76	47290	0.77	ppb		99
19) trans-1,2-dichloroethene	6.04	61	27796	0.98	ppb		100
20) methyl tert-butyl ether	6.10	73	30375	0.91	ppb		95
21) 1,1-dichloroethane	6.44	63	42391	0.99	ppb		99
22) Vinyl acetate	6.46	43	17360	0.93	ppb		100
23) Methyl Ethyl Ketone	6.95	43	31420	0.99	ppb		98
24) cis-1,2-dichloroethene	7.33	61	21757	0.94	ppb		98
25) Hexane	6.96	41	17191	1.06	ppb		90
26) Ethyl acetate	7.54	43	19735	0.91	ppb		98
27) Chloroform	7.92	83	68275	1.00	ppb		99
28) Tetrahydrofuran	8.10	42	7711	0.94	ppb		97
29) 1,2-dichloroethane	9.00	62	36842	0.99	ppb		99
31) 1,1,1-trichloroethane	8.70	97	68950	1.04	ppb		99
32) Cyclohexane	9.41	56	16019	1.13	ppb		99
33) Carbon tetrachloride	9.34	117	97257	1.00	ppb		100
34) Benzene	9.31	78	56084	1.10	ppb		91
35) 1,4-dioxane	11.13	88	5835	0.87	ppb		92
36) 2,2,4-trimethylpentane	10.28	57	45350	1.07	ppb		98
37) Heptane	10.71	43	13599	1.02	ppb		96
38) Trichloroethene	10.79	130	39849	1.04	ppb		99
39) 1,2-dichloropropane	10.91	63	20715	1.05	ppb		100
40) Bromodichloromethane	11.30	83	69389	1.07	ppb		100
41) cis-1,3-dichloropropene	12.20	75	25091	1.03	ppb		100
42) trans-1,3-dichloropropene	12.99	75	19420	0.99	ppb		88
43) 1,1,2-trichloroethane	13.30	97	35363	1.06	ppb		100
45) Toluene	13.03	92	30507	1.01	ppb		99
46) Methyl Isobutyl Ketone	12.15	43	14234	0.82	ppb		95
47) Dibromochloromethane	13.97	129	75172	0.96	ppb		100
48) Methyl Butyl Ketone	13.52	43	13459m	0.85	ppb		
49) 1,2-dibromoethane	14.21	107	50798	1.02	ppb		97
50) Tetrachloroethylene	14.06	164	44741	1.05	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122204.D Vial: 4
Acq On : 22 Dec 2009 9:46 Operator: RJP
Sample : LCS1UT-122209 Inst : MSD #1
Misc : LCS1UT-122209 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 10:08:31 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
51) Chlorobenzene	15.00	112	56546	1.00 ppb	99
52) Ethylbenzene	15.26	91	53570	0.97 ppb	97
53) m&p-xylene	15.46	91	106243	2.08 ppb	98
54) Styrene	15.86	104	28447	0.96 ppb	99
55) Bromoform	15.94	173	75314	0.94 ppb	99
56) o-xylene	15.88	91	61532	0.97 ppb	98
58) 1,1,2,2-tetrachloroethane	16.31	83	66882	1.02 ppb	97
59) 4-ethyltoluene	17.07	105	29116	0.82 ppb	100
60) 1,3,5-trimethylbenzene	17.13	105	45865	0.98 ppb	98
61) 1,2,4-trimethylbenzene	17.53	105	31228	0.92 ppb	98
62) 1,3-dichlorobenzene	17.79	146	50398	0.97 ppb	99
63) benzyl chloride	17.85	91	18902	0.76 ppb	100
64) 1,4-dichlorobenzene	17.91	146	49282	0.97 ppb	98
65) 1,2-dichlorobenzene	18.19	146	46476	0.96 ppb	99
66) 1,2,4-trichlorobenzene	19.80	180	18219	0.96 ppb	97
67) Naphthalene	19.96	128	13334	0.78 ppb	100
68) Hexachloro-1,3-butadiene	20.06	225	49921	1.10 ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

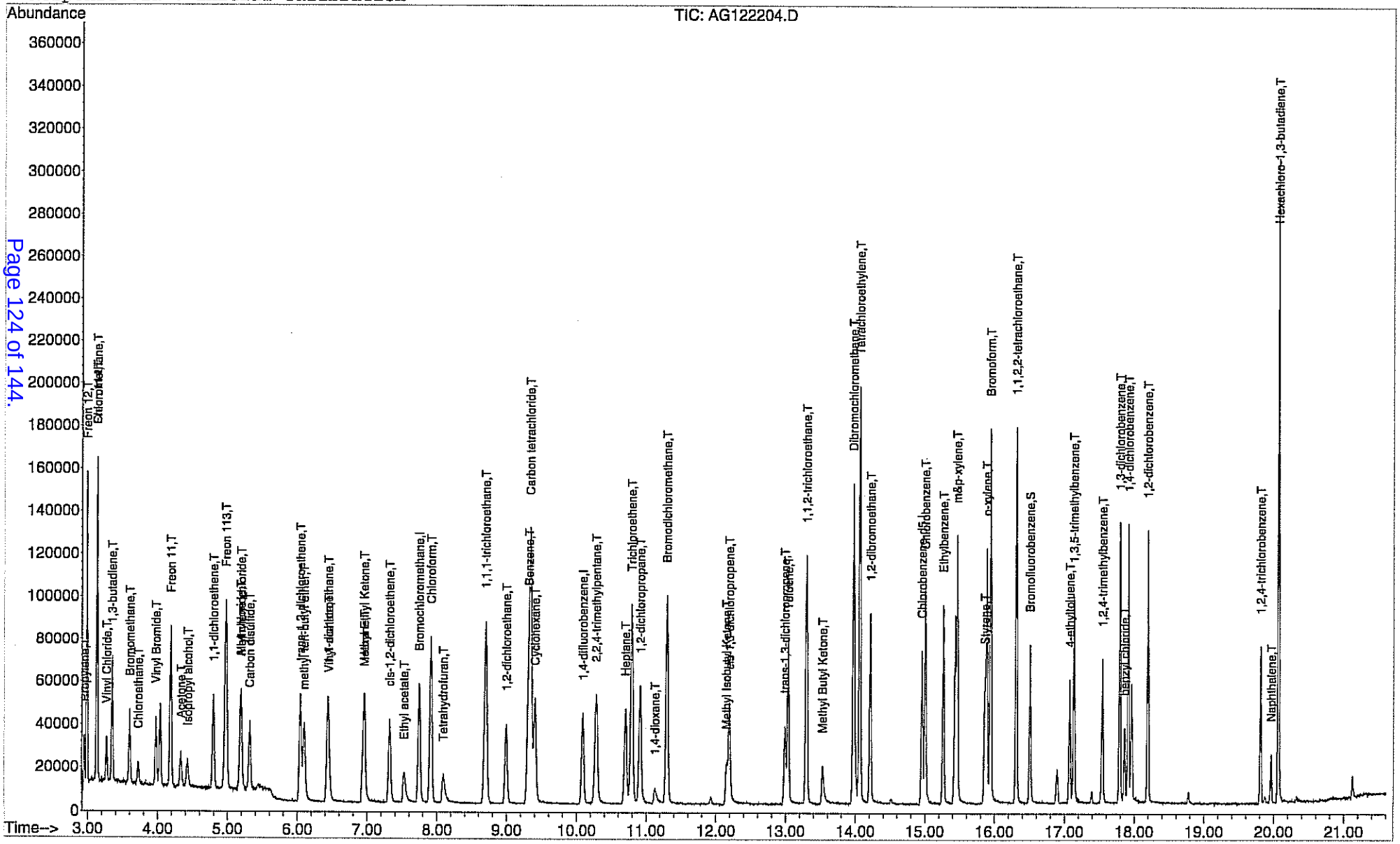
Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122204.D
Acq On : 22 Dec 2009 9:46
Sample : LCS1UT-122209
Misc : LCS1UT-122209
MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:25 2009

Vial: 4
Operator: RJP
Inst : MSD #1
Multiplr: 1.00

Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122228.D Vial: 13
Acq On : 22 Dec 2009 23:29 Operator: RJP
Sample : LCS1UTD-122209 Inst : MSD #1
Misc : LCS1UTD-122209 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 23:51:07 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Bromochloromethane	7.74	128	19293	1.00	ppb		-0.02
30) 1,4-difluorobenzene	10.08	114	40988	1.00	ppb		-0.02
44) Chlorobenzene-d5	14.95	117	38634	1.00	ppb		-0.01
System Monitoring Compounds							
57) Bromofluorobenzene	16.49	95	18382	1.03	ppb		-0.02
Spiked Amount 1.000	Range 70 - 130		Recovery = 103.00%				
Target Compounds							Qvalue
2) Propylene	2.95	41	9290	0.79	ppb		96
3) Freon 12	2.99	85	91139	0.92	ppb		99
4) Chloromethane	3.13	50	16351	0.76	ppb		94
5) Freon 114	3.13	85	48961	0.75	ppb		99
6) Vinyl Chloride	3.27	62	14843m	0.73	ppb		
7) 1,3-butadiene	3.34	39	12419	0.76	ppb		90
8) Bromomethane	3.60	94	16842	0.72	ppb		96
9) Chloroethane	3.72	64	5490	0.72	ppb		94
10) Vinyl Bromide	3.98	106	17169	0.74	ppb		98
11) Freon 11	4.19	101	53303	0.77	ppb		99
12) Acetone	4.34	58	5838m	0.87	ppb		
13) Isopropyl alcohol	4.43	45	14821m	0.82	ppb		
14) 1,1-dichloroethene	4.80	96	16073	0.73	ppb		99
15) Freon 113	4.97	101	61896m	1.24	ppb		
16) Methylene chloride	5.19	84	22579	1.18	ppb	#	87
17) Allyl chloride	5.18	41	15245m	0.91	ppb		
18) Carbon disulfide	5.32	76	67734	1.11	ppb		99
19) trans-1,2-dichloroethene	6.04	61	21976	0.78	ppb		98
20) methyl tert-butyl ether	6.09	73	24506	0.74	ppb		94
21) 1,1-dichloroethane	6.43	63	36254	0.85	ppb		99
22) Vinyl acetate	6.46	43	13266	0.71	ppb		100
23) Methyl Ethyl Ketone	6.95	43	26667	0.85	ppb		98
24) cis-1,2-dichloroethene	7.31	61	19039	0.83	ppb		99
25) Hexane	6.96	41	13809	0.86	ppb		96
26) Ethyl acetate	7.53	43	16435	0.77	ppb		99
27) Chloroform	7.90	83	61330	0.91	ppb		99
28) Tetrahydrofuran	8.08	42	6026	0.74	ppb		95
29) 1,2-dichloroethane	8.99	62	32571	0.88	ppb		100
31) 1,1,1-trichloroethane	8.69	97	62599	0.98	ppb		100
32) Cyclohexane	9.40	56	13025	0.95	ppb		93
33) Carbon tetrachloride	9.33	117	90107	0.96	ppb		99
34) Benzene	9.30	78	42942	0.88	ppb		92
35) 1,4-dioxane	11.11	88	6405	0.99	ppb		82
36) 2,2,4-trimethylpentane	10.28	57	36736	0.90	ppb		97
37) Heptane	10.69	43	11029	0.86	ppb		94
38) Trichloroethene	10.78	130	35239	0.96	ppb		99
39) 1,2-dichloropropane	10.90	63	17850	0.94	ppb		97
40) Bromodichloromethane	11.29	83	62028	0.99	ppb		100
41) cis-1,3-dichloropropene	12.19	75	22829	0.98	ppb		99
42) trans-1,3-dichloropropene	12.98	75	16605	0.88	ppb		90
43) 1,1,2-trichloroethane	13.29	97	31159	0.97	ppb		99
45) Toluene	13.03	92	26067	0.88	ppb		100
46) Methyl Isobutyl Ketone	12.14	43	17343	1.02	ppb		99
47) Dibromochloromethane	13.96	129	67590	0.88	ppb		98
48) Methyl Butyl Ketone	13.51	43	16832	1.08	ppb		89
49) 1,2-dibromoethane	14.20	107	45818	0.94	ppb		98
50) Tetrachloroethylene	14.05	164	40933	0.98	ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122228.D Vial: 13
Acq On : 22 Dec 2009 23:29 Operator: RJP
Sample : LCS1UTD-122209 Inst : MSD #1
Misc : LCS1UTD-122209 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 22 23:51:07 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

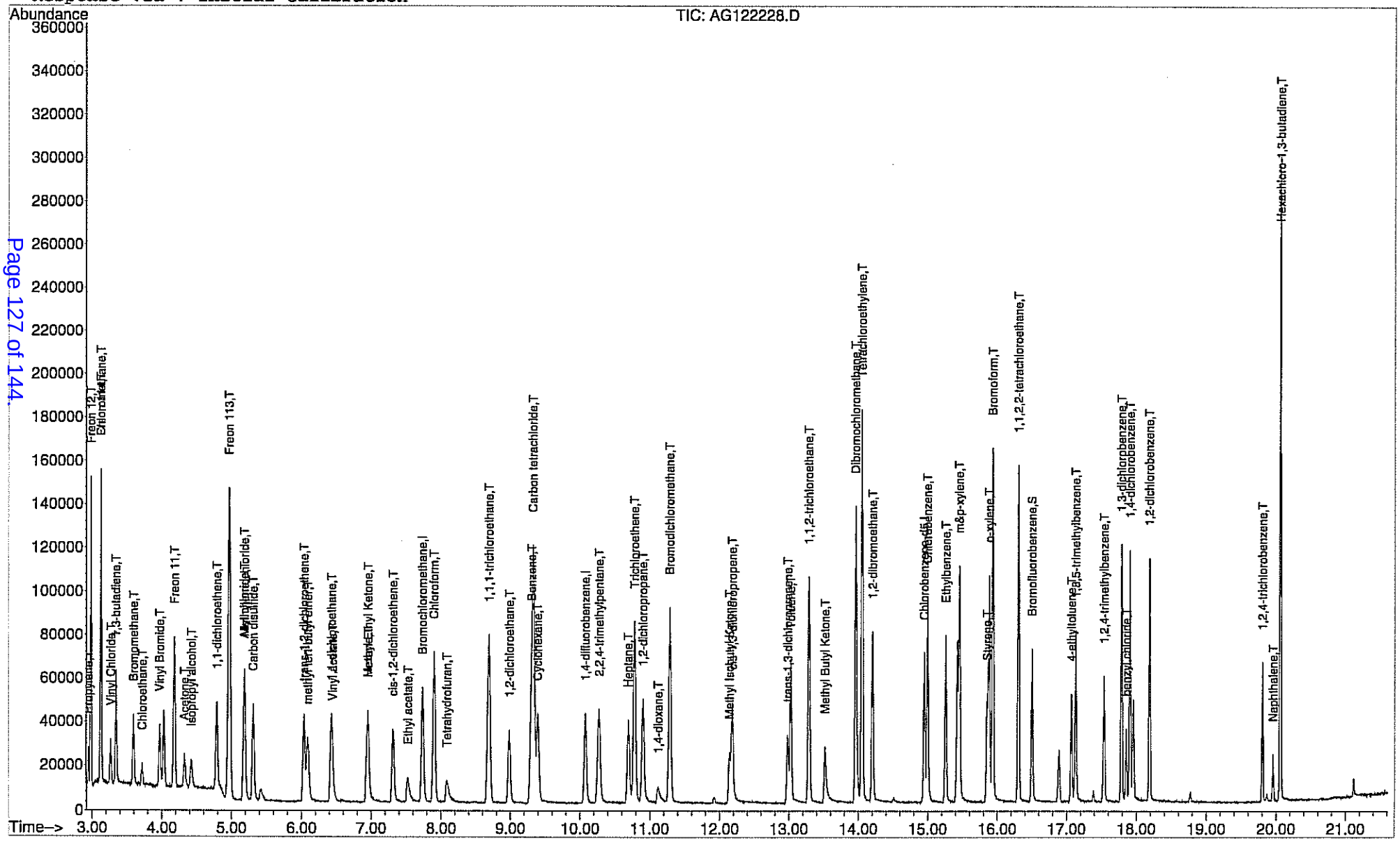
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
51) Chlorobenzene	14.99	112	50140	0.90 ppb	100
52) Ethylbenzene	15.25	91	46868	0.87 ppb	98
53) m&p-xylene	15.45	91	93784	1.88 ppb	100
54) Styrene	15.85	104	24561	0.85 ppb	99
55) Bromoform	15.93	173	69542	0.89 ppb	100
56) o-xylene	15.88	91	52507	0.85 ppb	99
58) 1,1,2,2-tetrachloroethane	16.30	83	56844	0.89 ppb	97
59) 4-ethyltoluene	17.06	105	26090	0.75 ppb	100
60) 1,3,5-trimethylbenzene	17.12	105	39555	0.86 ppb	99
61) 1,2,4-trimethylbenzene	17.53	105	27900	0.84 ppb	99
62) 1,3-dichlorobenzene	17.78	146	46278	0.91 ppb	99
63) benzyl chloride	17.85	91	18477	0.75 ppb	99
64) 1,4-dichlorobenzene	17.90	146	45166	0.91 ppb	97
65) 1,2-dichlorobenzene	18.18	146	42429	0.90 ppb	99
66) 1,2,4-trichlorobenzene	19.80	180	17202	0.92 ppb	96
67) Naphthalene	19.95	128	12564	0.75 ppb	99
68) Hexachloro-1,3-butadiene	20.06	225	48504	1.09 ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG122228.D Vial: 13
Acq On : 22 Dec 2009 23:29 Operator: RJP
Sample : LCS1UTD-122209 Inst : MSD #1
Misc : LCS1UTD-122209 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 23 8:23 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Sat Jan 16 11:42:57 2010
Response via : Initial Calibration



GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

INJECTION LOG

Centek Laboratories, LLC
Instrument: HP5973 MSD
GC Column: J&W DB-5MS, 1.5u, 60M

Injection Logbook A-MSD

Internal Standard Stock #: 7508
Standard Stock #(s) 7509
LCS Stock #(s) _____
Method Reference: Toxic Organic Compounds in Ambient Air Jan-99

Detection Limit	Login Number	Data File Name	Dil. Factor	Inj Vol cc	MethodQ File	Group Number	Inj. Date	Inj. Time	Comments	CD BackUp#
	BFBIUT	AG111609	-		AN16-1UT		11/16/09	1513		
	AIUT-2.0	11	-							
	1.50	12	-							
	1.25	13	-							
	1.0	14	-	200						
	0.75	15	-							
	0.50	16	-							
	0.30	17	-							
	0.15	18	-				11/17/09	0013		
	0.10	19	-							
	0.04	21	-					0150		

Analyzed by: _____

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Centek Laboratories, LLC

Instrument: HP5973 MSD
GC Column: J&W DB-5MS, 1.5u, 60M

Injection Logbook A-MSD

Internal Standard Stock #: 7565
Standard Stock #(s) 7562
LCS Stock #(s) 7563
Method Reference: Toxic Organic Compounds in Ambient Air Jan-99

Detection Limit	Login Number	Data File Name	Dil. Factor	Inj Vol cc	MethodQ File	Group Number	Inj. Date	Inj. Time	Comments	CD BackUp#
	BFBLUT	AG122202	-	-	AN16-LUT		12/22/05	0822		
	AIUT-1.0	03	-	200						
	LCSLUT-122205	04	-							
	MBLUT	05	-							
	C05/2043-001	06	-							
	C05/2045-004	07	-							
	005	08	-							
	007	09	-							
	008	10	-							
	009	11	-							
	013	12	-							
	014	13	-							
	017	14	-							
	015	15	-							
	022	16	-	↓						
	C05/2043-002DL	17	20	10						
	C05/2045-006	18	10	20						
	010	19	↓	↓						
	011	20								
	012	21								
	015	22								
	016	23	↓	↓			↓			
	LCSLUTD-122205	24	-	200						
	C05/2045-018DL	25	10	20			12/23/05	0002		
	020	26								
	021	27								
	023	28								
	024	29	↓	↓	↓		↓	0217		

Analyzed by: [signature]

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Centek Laboratories, LLC
Instrument: HP5973 MSD
GC Column: J&W DB-5MS, 1.5u, 60M

Injection Logbook A-MSD

Internal Standard Stock #: 7565 7571 **
Standard Stock #(s) 7562 7572
LCS Stock #(s) 7563 7573
Method Reference: Toxic Organic Compounds in Ambient Air Jan-99

Detection Limit	Login Number	Data File Name	Dil. Factor	Inj Vol cc	MethodQ File	Group Number	Inj. Date	Inj. Time	Comments	CD BackUp#
	C091204S-001	AG122234	-	200	AN16.1UT		12/23/09	0245		
	↓ DL	35	20	10						
	C091204T-001	36	-	200						
	002	37	-	↓						
	001 DL	38	20	10						
	002 ↓	39	↓	↓				0536		
	BLK	40	-	-						
	BFBIUT	AG122301	-	-	AN16-1UT		12/23/09	0837	**	
	AIUT-1.0	02	-	200						
	LCSIUT-122309	03	-							
	MBIUT ↓	04	-	↓						
	C091204T-002DL	05	270	20(27)*						
	C091204S-004	06	10	20						
	005	07								
	007	08	↓	↓						
	008	09	20	10						
	009	10	10	20						
	013	11	↓	↓						
	014	12	20	10						
	017	13	↓	↓						
	019	14	5	40						
	022	15	10	20						
	001	16	-	200						
	↓ DL	17	40	5						
	002	18	-	200						
	↓ DL	19	40	5						
	003	20	↓	200	↓		↓	1534	↓	

Analyzed by: [signature]

*DL IN CAN

GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

STANDARDS LOG

Centek Laboratories, LLC

GC/MS Calibration Standards Logbook

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
6117	11/11/08	11/14/08	TO15IUT IS^A	6112	50ppb	0.5psig	30psia	1 ppb	MD	
6118	11/12/08	11/09	TO15 IS	AB-2153	1 ppm	SPECTRA GASES			mp	
6119	↓	↓	TO15 SUBSET	AB-2274	↓	↓	↓	↓	↓	
6120	↓	↓	TO14 MIX	AB-2238	↓	↓	↓	↓	↓	
6121	11/14/08	11/21/08	TO15 IS	6118	1ppm	1.5psig	30psia	50 ppb	mp	
6122	↓	↓	↓ STD	4192/4193	↓	↓	↓	↓	↓	
6123	↓	↓	↓ LCS	2056/2057	↓	↓	↓	↓	↓	
6124	↓	↓	TO15IUT IS^A	6121	50ppb	0.5psig	45psia	1ppb	↓	
6125	↓	↓	↓ STD^A	6122	↓	↓	↓	↓	↓	
6126	↓	↓	↓ LCS	6123	↓	↓	↓	↓	↓	
6127	11/15/08	↓	TO15IUT IS^A	6121	50 ppb	0.9psig	45psia	1ppb	↓	
6128	11/17/08	11/21/08	TO15IUT IS^B	6121	↓	↓	↓	↓	↓	
6129	↓	↓	↓ STD^B	6122	↓	↓	↓	↓	↓	
6130	↓	↓	↓ IS^A	↓	↓	↓	↓	↓	↓	
6131	11/18/08	↓	↓ IS^A	↓	↓	↓	↓	↓	↓	
6132	↓	↓	↓ IS^B	↓	↓	↓	↓	↓	↓	
6133	11/19/08	↓	↓ IS^A	↓	↓	↓	↓	↓	↓	
6134	↓	↓	↓ IS^B	↓	↓	↓	↓	↓	↓	

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
7365	8/30/09	8/31/09	TO15IVT IS[A]	7352	50ppb	0.9psig	45psia	1ppb	MP	
7366	8/31/09	9/10	TO15 IS	06503 003	1ppm	SCOTT GASES		1ppm	MP	
7367	8/31/09	9/6/09	TO15 IS	7366	1ppm	1.5psig	30psia	50ppb	MP	
7368	↓	↓	STD	6119/20	↓	↓	↓	↓		
7369			LCS	6192/93						
7370			SIL/SUL	6194						
7371			TO15IVT IS[A]	7367	50ppb	0.9psig	45psia	1ppb		
7372			STD[A]	7368						
7373			LCS	7369						
7374	9/1/09		TO15IVT IS[A]	7367						
7375	9/2/09	↓	↓	↓	↓	↓	↓	↓		
7376	9/1/09	9/6/09	TO15IVT IS[B]	7367	50ppb	0.9psig	45psia	1ppb	I.L.	
7377	↓	↓	↓ STD[B]	7368	↓	↓	↓	↓	↓	
7378	9/2/09	9/6/09	TO15IVT IS[B]	7367	50ppb	0.9psig	45psia	1ppb	I.L.	
7379	9/2/09	9/6/09	↓ IS[A]	7367	↓	↓	↓	↓	I.L.	
7380	9/3/09	9/10/09	TO15 IS	7366	1ppm	1.5psig	30psia	50ppb	I.L.	
7381	9/3/09	9/10/09	TO15IVT IS[A]	7380	50ppb	0.9psig	45psia	1ppb	I.L.	
7382	9/3/09	9/10/09	↓ IS[B]	7380	↓	↓	↓	↓	↓	
7382A	8/31/09	9/6/09	TO15IVT IS[B]	7367	50ppb	0.9psig	45psia	1ppb	I.L.	
7382B	↓	↓	↓ STD[B]	7368	↓	↓	↓	↓	↓	

Std #	Date Prep	Date exp	Description	Stock #	Stock conc	Initial vol	finial vol	Final conc/ppbV	Prep by	Chkd by
7555	12/16/09	12/23/09	TO15 IS	7366	1ppm	1.5psig	30psia	50ppb	MD	
7556			STD	6119/20						
7557			LCS	4152/53						
7558			SUL/SLX	6194						
7559			10ppm / FORM	7068	36.5%	1.1uL	50psia	10ppm		
7560			50ppb	7559	~~10ppm~~ 50ppb	~~.23psig~~ 0.5psig	~~50psia~~ 45psia	50ppb		
7561			TO15/UG IS[A]	7555	50ppb	0.5psig	45psia	1ppb		
7562			STD[A]	7556						
7563			LCS	7557						
7564	12/18/09		IS[A]	7555						
7565	12/22/09									
7566	12/23/09	12/30/09	TO15 IS	7366	1ppm	1.5psig	30psia	50ppb	MD	
7567			STD	6119/20						
7568			LCS	4152/53						
7569			10ppm / FORM	6194	36.5%	1.1uL	50psia	10ppm		
7570			50ppb	7565	10ppm	.23psig	50psia	50ppb		
7571			TO15/UG IS[A]	7566	50ppb	1.5psig	30psia	1ppb		
7572			STD[A]	7567						

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GC/MS VOLATILES-WHOLE AIR

METHOD TO-15

CANISTER CLEANING LOG

Centek Laboratories, LLC

Instrument: Entech 3100

QC Canister Cleaning & Maintenance Logbook

Canister Number	QC Can Number	Number of Cycles	Date	QC Batch Number	Maintenance
477	~~88~~ 335	20	12-4-09	VAC 120409 A	10649.25
461					
288					
264					
335					
89	136			B	
563					
207					
459					
136					
190	170			C	
166					
365					
551					
170					
171	159			D	
201					
93					
410					
159					
317	539			E	
142					
202					
315					
539					

Cleaned by: _____

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Centek Laboratories, LLC

Instrument: Entech 3100

QC Canister Cleaning & Maintenance Logbook

Canister Number	QC Can Number	Number of Cycles	Date	QC Batch Number	Maintenance
38	199	20	12-4-09	WAC120409 F	1UG+0.25
330					
205					
319					
199	↓				
469	494			6	
282					
548					
542					
494					

Cleaned by: _____

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Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120411.D Vial: 5
Acq On : 4 Dec 2009 15:44 Operator: RJP
Sample : WAC120409E Inst : MSD #1
Misc : 1UG + 0.25UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 16:05:56 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

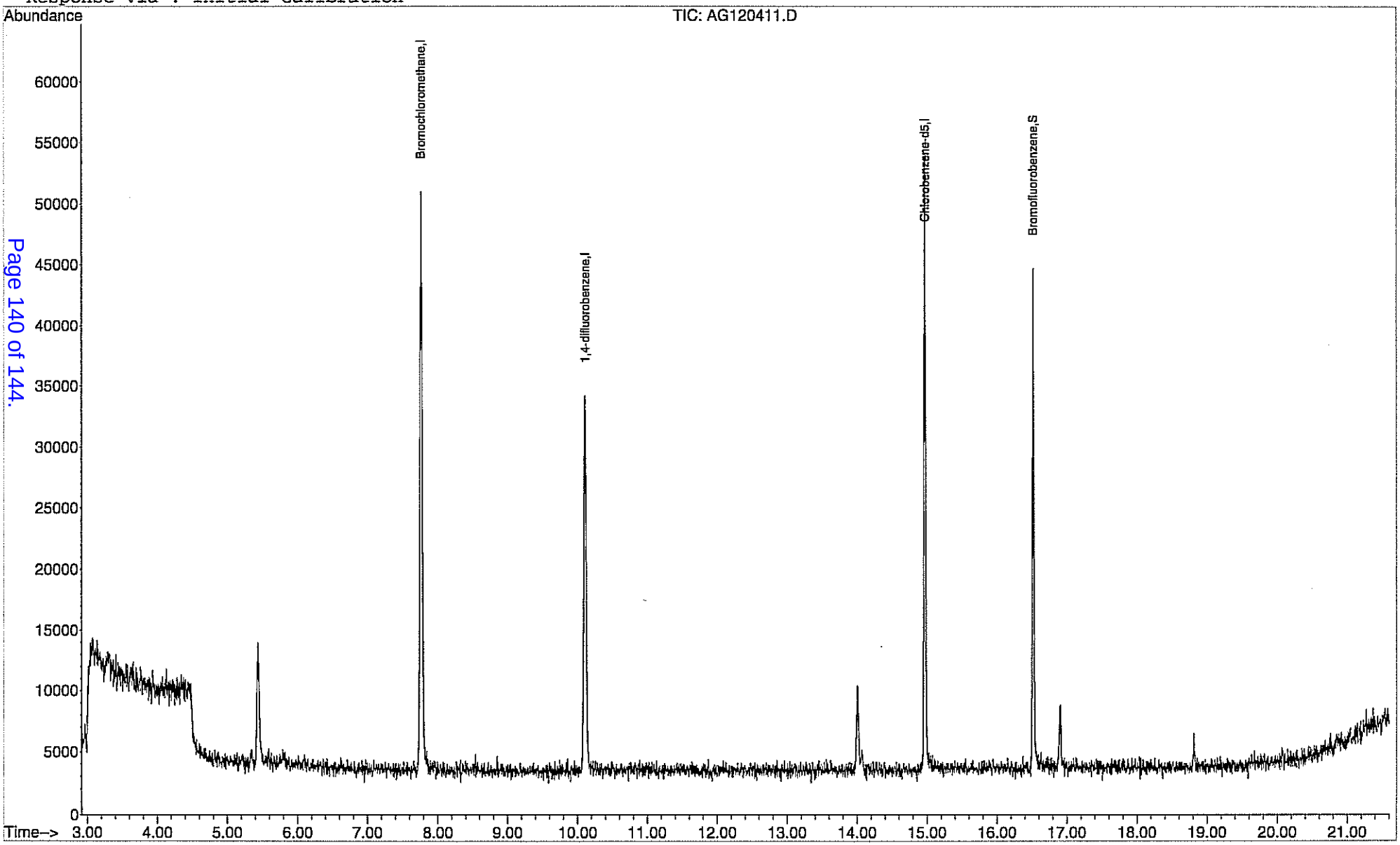
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.77	128	17331	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	32765	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	30180	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.51	95	11084	0.80	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 80.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120411.D Vial: 5
Acq On : 4 Dec 2009 15:44 Operator: RJP
Sample : WAC120409E Inst : MSD #1
Misc : 1UG + 0.25UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 4 16:05 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120412.D Vial: 6
Acq On : 4 Dec 2009 16:16 Operator: RJP
Sample : WAC120409F Inst : MSD #1
Misc : 1UG + 0.25UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 16:38:18 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

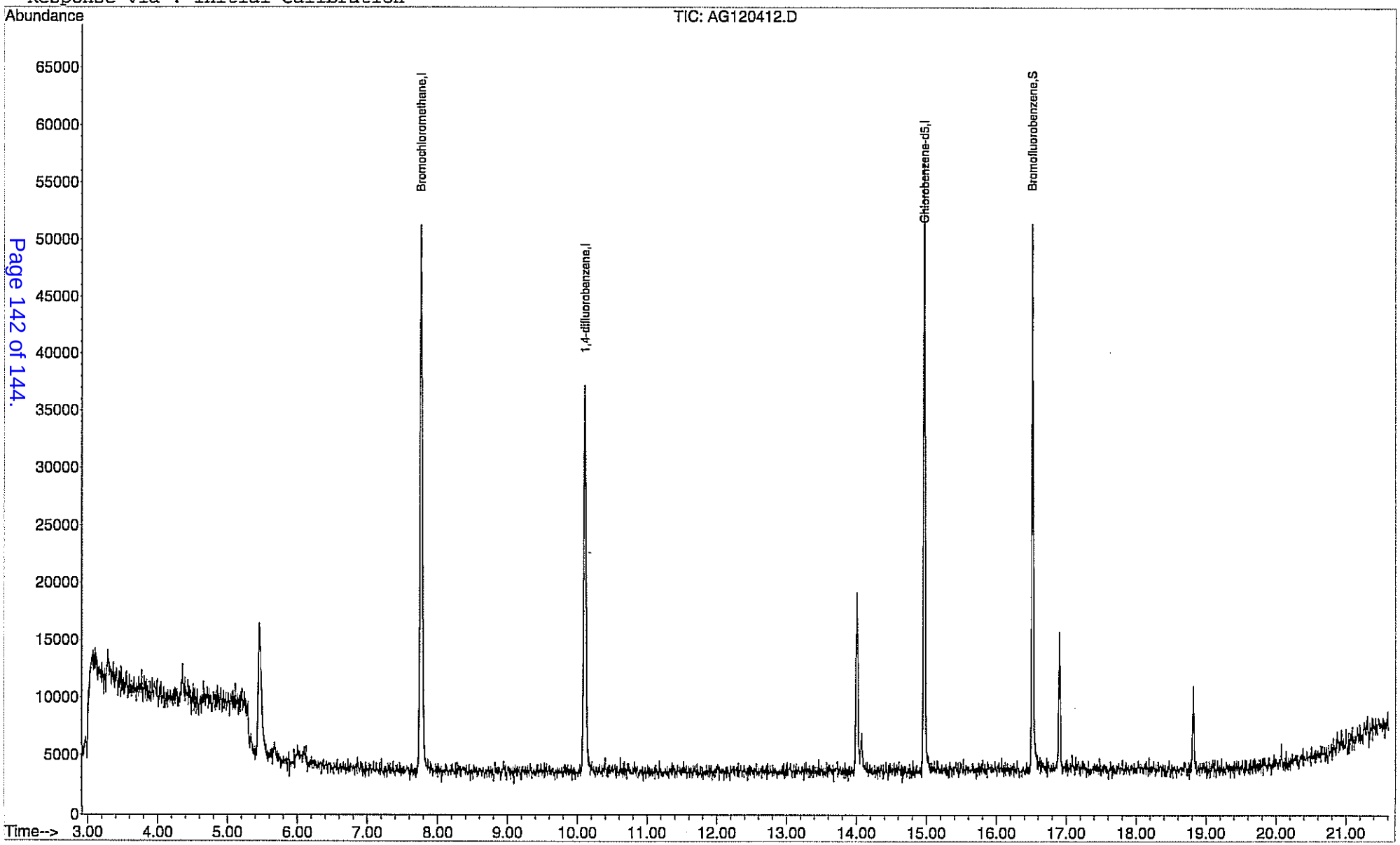
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.77	128	17717	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	34870	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	32150	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.51	95	12071	0.81	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 81.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120412.D Vial: 6
Acq On : 4 Dec 2009 16:16 Operator: RJP
Sample : WAC120409F Inst : MSD #1
Misc : 1UG + 0.25UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:01 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120413.D Vial: 7
Acq On : 4 Dec 2009 16:48 Operator: RJP
Sample : WAC120409G Inst : MSD #1
Misc : 1UG + 0.25UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 04 17:10:12 2009 Quant Results File: AN16_1UT.RES

Quant Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration
DataAcq Meth : AN16_1UT

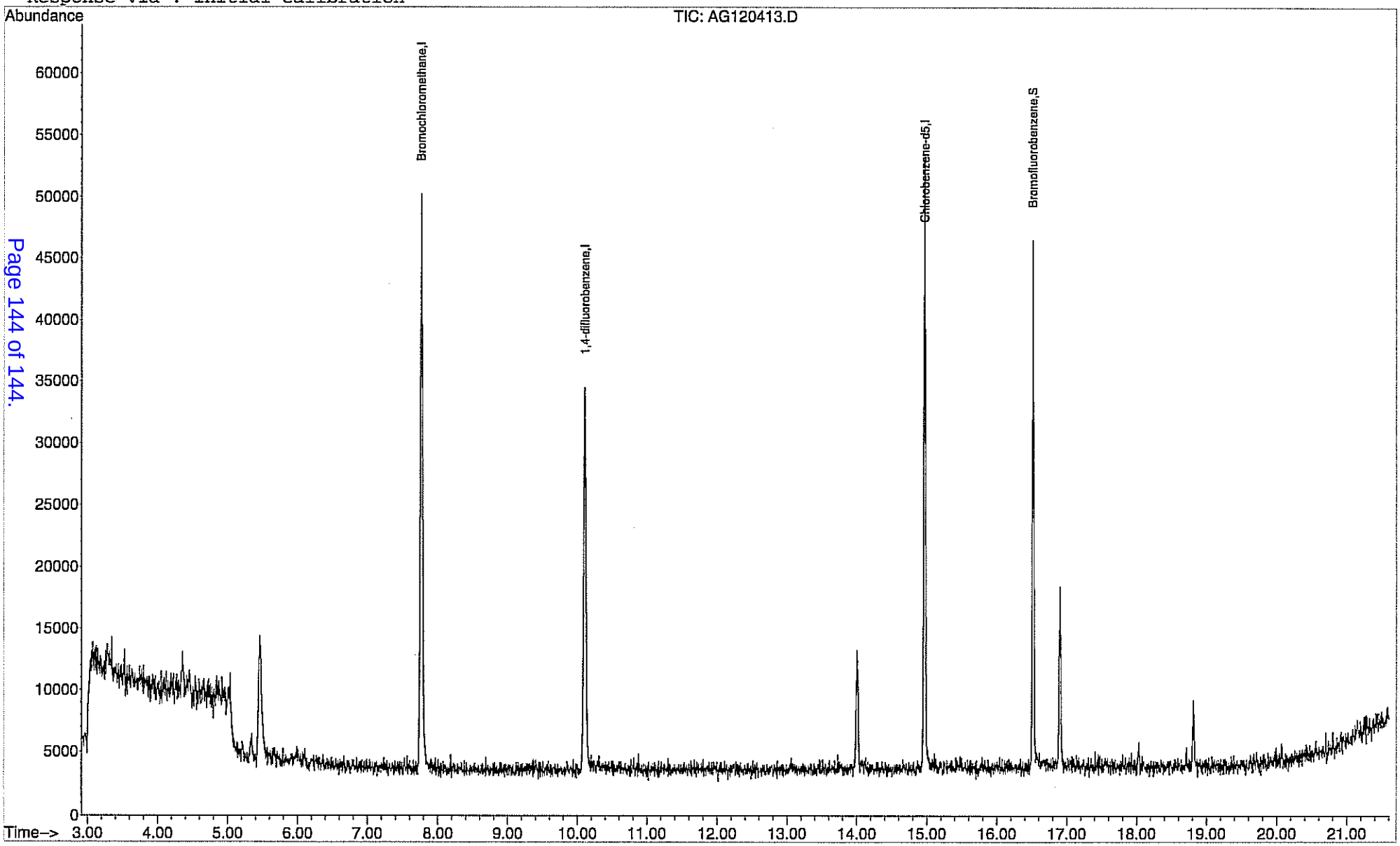
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.77	128	16977	1.00	ppb	0.00
30) 1,4-difluorobenzene	10.11	114	32864	1.00	ppb	0.00
44) Chlorobenzene-d5	14.96	117	30561	1.00	ppb	0.00
System Monitoring Compounds						
57) Bromofluorobenzene	16.51	95	10461	0.74	ppb	0.00
Spiked Amount 1.000	Range 70 - 130		Recovery = 74.00%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\AG120413.D Vial: 7
Acq On : 4 Dec 2009 16:48 Operator: RJP
Sample : WAC120409G Inst : MSD #1
Misc : 1UG + 0.25UG Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 9 12:01 2009 Quant Results File: AN16_1UT.RES

Method : C:\HPCHEM\1\METHODS\AN16_1UT.M (RTE Integrator)
Title : TO-15 VOA Standards for 5 point calibration
Last Update : Tue Nov 17 09:37:50 2009
Response via : Initial Calibration



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

Work Order: RSK0991

Project Description
LMC - Utica Site

For:

Jeff Bonsteel
ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Candace L. Fox

Candace Fox
Project Manager
candace.fox@testamericainc.com

Tuesday, January 12, 2010

This is a revised report.

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

TestAmerica Buffalo
Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accre ditation is required or available. Any exceptions to NELAP requirements are noted in this report.

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

CASE NARRATIVE

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

The sample GW-6(11-12)RE1 was analyzed using medium level techniques due to high concentrations of target analytes. This sample and associated quality control samples were extracted together in an extraction batch, but were analyzed in different batches. The Method Blank (9K27033-BLK1) and the Matrix Spike Blank (9K27033-BS1) were in an analytical batch on 11/27/2009 that was prior to the field sample analysis on 11/30/2009.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

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TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

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DATA QUALIFIERS AND DEFINITIONS

D08	Dilution required due to high concentration of target analyte(s)
E	Concentration exceeds the calibration range and therefore result is semi-quantitative.
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
N1	See case narrative.
P11	Sample was not sufficiently preserved at time of collection. Sample pH is >2
W1	Sample was prepared and analyzed utilizing the medium level extraction.
NR	Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

ADDITIONAL COMMENTS

Results are reported on a wet weight basis unless otherwise noted.

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Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01 (GW-1 - Water)						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1-Dichloroethane	**4.0**	P11	1.0	0.38	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1-Dichloroethene	**0.60**	P11,J	1.0	0.29	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**340**	P11,E	2.0	0.70	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Acetone	**18**	P11	5.0	1.3	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**340**	P11,E	1.0	0.38	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
trans-1,2-Dichloroethene	**4.8**	P11	1.0	0.42	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Trichloroethene	**3.2**	P11	1.0	0.46	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Vinyl chloride	**94**	P11	1.0	0.24	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Sample ID: RSK0991-01RE1 (GW-1 - Water)						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1-Dichloroethane	**3.9**	D08, P11,J	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloroethene, Total	**320**	D08, P11	10	3.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Acetone	**15**	D08, P11,J	25	6.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
cis-1,2-Dichloroethene	**320**	D08, P11	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
trans-1,2-Dichloroethene	**4.2**	D08, P11,J	5.0	2.1	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Trichloroethene	**2.6**	D08, P11,J	5.0	2.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Vinyl chloride	**91**	D08, P11	5.0	1.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Sample ID: RSK0991-02 (GW-2 - Water)						**Sampled: 11/17/09 08:40**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,2-Dichlorobenzene	**14**	P11	1.0	0.20	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**76**	P11	2.0	0.70	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Acetone	**26**	P11	5.0	1.3	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chlorobenzene	**2.8**	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**74**	P11	1.0	0.38	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
trans-1,2-Dichloroethene	**2.1**	P11	1.0	0.42	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Trichloroethene	**1.1**	P11	1.0	0.46	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Vinyl chloride	**17**	P11	1.0	0.24	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Sample ID: RSK0991-03 (GW-3 - Water)						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,2-Dichloroethene, Total	**0.82**	P11,J	2.0	0.70	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Acetone	**12**	P11	5.0	1.3	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chloroethane	**180**	P11,E	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**0.82**	P11,J	1.0	0.38	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methyl tert-Butyl Ether	**0.73**	P11,J	1.0	0.16	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Sample ID: RSK0991-03RE1 (GW-3 - Water)						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
Acetone	**10**	D08,J	20	5.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chloroethane	**170**	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Sample ID: RSK0991-04 (GW-4 - Water)						**Sampled: 11/17/09 11:10**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
Acetone	**5.0**	P11	5.0	1.3	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B

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Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05 (GW-6 - Water)					**Sampled: 11/18/09 11:15**			**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1-Dichloroethane	**0.80**	J	1.0	0.38	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**4.7**		2.0	0.70	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**4.7**		1.0	0.38	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Ethylbenzene	**1.9**		1.0	0.18	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Tetrachloroethene	**500**	E	1.0	0.36	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Toluene	**46**		1.0	0.51	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Trichloroethene	**27**		1.0	0.46	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Xylenes, total	**5.2**		2.0	0.66	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Sample ID: RSK0991-05RE1 (GW-6 - Water)					**Sampled: 11/18/09 11:15**			**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
cis-1,2-Dichloroethene	**5.9**	D08,J	10	3.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Tetrachloroethene	**620**	D08	10	3.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Toluene	**44**	D08	10	5.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Trichloroethene	**28**	D08	10	4.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Sample ID: RSK0991-06 (GW-5 - Water)					**Sampled: 11/19/09 11:25**			**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,2-Trichlorotrifluoroethane	**3.5**		1.0	0.31	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1-Dichloroethane	**440**	E	1.0	0.38	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1-Dichloroethene	**2.2**		1.0	0.29	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**100**		2.0	0.70	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Acetone	**6.1**		5.0	1.3	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chloroethane	**120**	E	1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**100**		1.0	0.38	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Tetrachloroethene	**1.5**		1.0	0.36	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Trichloroethene	**47**		1.0	0.46	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Vinyl chloride	**22**		1.0	0.24	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Sample ID: RSK0991-06RE1 (GW-5 - Water)					**Sampled: 11/19/09 11:25**			**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1-Dichloroethane	**450**	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloroethene, Total	**100**	D08	16	5.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chloroethane	**130**	D08	8.0	2.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
cis-1,2-Dichloroethene	**100**	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Trichloroethene	**48**	D08	8.0	3.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Vinyl chloride	**23**	D08	8.0	1.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Sample ID: RSK0991-07 (GW-6 (11-12) - Solid)					**Sampled: 11/18/09 11:15**			**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
2-Butanone (MEK)	**510**	W1,J	670	48	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Ethylbenzene	**4200**	W1	130	9.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Tetrachloroethene	**170000**	W1,E	130	18	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Toluene	**10000**	W1	130	10	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Trichloroethene	**3100**	W1	130	9.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Xylenes, total	**15000**	W1	270	23	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B

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Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07RE1 (GW-6 (11-12) - Solid)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
Ethylbenzene	**5000**	D08, W1, N1,J	6700	460	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Tetrachloroethene	**290000**	D08, W1, N1	6700	900	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Toluene	**13000**	D08, W1, N1	6700	510	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Trichloroethene	**4000**	D08, W1, N1,J	6700	460	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Xylenes, total	**15000**	D08, W1, N1	13000	1100	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B

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Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
GW-1	RSK0991-01	Water	11/16/09 13:45	11/20/09 10:30	
GW-2	RSK0991-02	Water	11/17/09 08:40	11/20/09 10:30	
GW-3	RSK0991-03	Water	11/17/09 09:02	11/20/09 10:30	
GW-4	RSK0991-04	Water	11/17/09 11:10	11/20/09 10:30	
GW-6	RSK0991-05	Water	11/18/09 11:15	11/20/09 10:30	
GW-5	RSK0991-06	Water	11/19/09 11:25	11/20/09 10:30	
GW-6 (11-12)	RSK0991-07	Solid	11/18/09 11:15	11/20/09 10:30	
TRIP BLANK	RSK0991-08	Water	11/19/09	11/20/09 10:30	

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01 (GW-1 - Water)						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1-Dichloroethane	**4.0**	P11	1.0	0.38	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1-Dichloroethene	**0.60**	P11,J	1.0	0.29	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND	P11	1.0	0.20	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**340**	P11,E	2.0	0.70	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
2-Butanone (MEK)	ND	P11	5.0	1.3	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
2-Hexanone	ND	P11	5.0	1.2	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	P11	5.0	0.91	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Acetone	**18**	P11	5.0	1.3	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Benzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Bromoform	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Bromomethane	ND	P11	1.0	0.28	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Carbon disulfide	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Carbon Tetrachloride	ND	P11	1.0	0.27	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chlorobenzene	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chlorodibromomethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chloroethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chloromethane	ND	P11	1.0	0.35	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**340**	P11,E	1.0	0.38	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Cyclohexane	ND	P11	1.0	0.53	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND	P11	1.0	0.16	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
trans-1,2-Dichloroethene	**4.8**	P11	1.0	0.42	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Trichloroethene	**3.2**	P11	1.0	0.46	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01 (GW-1 - Water) - cont.						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11	1.0	0.15	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Vinyl chloride	**94**	P11	1.0	0.24	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*99 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 17:55*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 17:55*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*95 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 17:55*	*DHC*	*9K24017*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
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Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01RE1 (GW-1 - Water)						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08, P11	5.0	1.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08, P11	5.0	1.1	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08, P11	5.0	1.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08, P11	5.0	1.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1-Dichloroethane	**3.9**	D08, P11,J	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08, P11	5.0	1.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08, P11	5.0	0.83	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08, P11	5.0	1.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08, P11	5.0	1.1	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloroethene, Total	**320**	D08, P11	10	3.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08, P11	25	6.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
2-Hexanone	ND	D08, P11	25	6.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08, P11	25	4.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Acetone	**15**	D08, P11,J	25	6.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Benzene	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Bromodichloromethane	ND	D08, P11	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Bromoform	ND	D08, P11	5.0	1.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Bromomethane	ND	D08, P11	5.0	1.4	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Carbon disulfide	ND	D08, P11	5.0	0.97	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08, P11	5.0	1.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chlorobenzene	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chloroethane	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chloroform	ND	D08, P11	5.0	1.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chloromethane	ND	D08, P11	5.0	1.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
cis-1,2-Dichloroethene	**320**	D08, P11	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Cyclohexane	ND	D08, P11	5.0	2.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08, P11	5.0	1.4	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Ethylbenzene	ND	D08, P11	5.0	0.92	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Isopropylbenzene	ND	D08, P11	5.0	0.96	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methyl Acetate	ND	D08, P11	5.0	2.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08, P11	5.0	0.80	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methylcyclohexane	ND	D08, P11	5.0	2.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methylene Chloride	ND	D08, P11	5.0	2.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Styrene	ND	D08, P11	5.0	0.92	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Tetrachloroethene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Toluene	ND	D08, P11	5.0	2.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
trans-1,2-Dichloroethene	**4.2**	D08, P11,J	5.0	2.1	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Trichloroethene	**2.6**	D08, P11,J	5.0	2.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01RE1 (GW-1 - Water) - cont.						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08, P11	5.0	0.76	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Vinyl acetate	ND	D08, P11	25	4.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Vinyl chloride	**91**	D08, P11	5.0	1.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Xylenes, total	ND	D08, P11	10	3.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*96 %*	*D08, P11*	*Surr Limits: (66-137%)*				*11/25/09 12:19*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*98 %*	*D08, P11*	*Surr Limits: (73-120%)*				*11/25/09 12:19*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*95 %*	*D08, P11*	*Surr Limits: (71-126%)*				*11/25/09 12:19*	*DHC*	*9K25014*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-02 (GW-2 - Water)						**Sampled: 11/17/09 08:40**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1-Dichloroethane	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1-Dichloroethene	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichlorobenzene	**14**	P11	1.0	0.20	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**76**	P11	2.0	0.70	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
2-Butanone (MEK)	ND	P11	5.0	1.3	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
2-Hexanone	ND	P11	5.0	1.2	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	P11	5.0	0.91	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Acetone	**26**	P11	5.0	1.3	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Benzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Bromoform	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Bromomethane	ND	P11	1.0	0.28	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Carbon disulfide	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Carbon Tetrachloride	ND	P11	1.0	0.27	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chlorobenzene	**2.8**	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chlorodibromomethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chloroethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chloromethane	ND	P11	1.0	0.35	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**74**	P11	1.0	0.38	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Cyclohexane	ND	P11	1.0	0.53	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND	P11	1.0	0.16	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
trans-1,2-Dichloroethene	**2.1**	P11	1.0	0.42	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Trichloroethene	**1.1**	P11	1.0	0.46	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
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Work Order: RSK0991

Project: LMC - Utica Site
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Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-02 (GW-2 - Water) - cont.						**Sampled: 11/17/09 08:40**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11	1.0	0.15	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Vinyl chloride	17	P11	1.0	0.24	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*98 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 18:19*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*96 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 18:19*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*94 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 18:19*	*DHC*	*9K24017*	*8260B*

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Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03 (GW-3 - Water)						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1-Dichloroethane	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1-Dichloroethene	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND	P11	1.0	0.20	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**0.82**	P11,J	2.0	0.70	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
2-Butanone (MEK)	ND	P11	5.0	1.3	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
2-Hexanone	ND	P11	5.0	1.2	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	P11	5.0	0.91	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Acetone	**12**	P11	5.0	1.3	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Benzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Bromoform	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Bromomethane	ND	P11	1.0	0.28	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Carbon disulfide	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Carbon Tetrachloride	ND	P11	1.0	0.27	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chlorobenzene	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chlorodibromomethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chloroethane	**180**	P11,E	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chloromethane	ND	P11	1.0	0.35	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**0.82**	P11,J	1.0	0.38	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Cyclohexane	ND	P11	1.0	0.53	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methyl tert-Butyl Ether	**0.73**	P11,J	1.0	0.16	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND	P11	1.0	0.42	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Trichloroethene	ND	P11	1.0	0.46	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03 (GW-3 - Water) - cont.						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11	1.0	0.15	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Vinyl chloride	ND	P11	1.0	0.24	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*96 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 18:44*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*96 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 18:44*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*92 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 18:44*	*DHC*	*9K24017*	*8260B*

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Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03RE1 (GW-3 - Water)						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08	4.0	0.85	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08	4.0	0.92	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08	4.0	1.2	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1-Dichloroethane	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08	4.0	1.2	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08	4.0	0.66	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08	4.0	0.81	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08	4.0	0.86	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloroethene, Total	ND	D08	8.0	2.8	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08	4.0	1.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08	20	5.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
2-Hexanone	ND	D08	20	5.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08	20	3.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Acetone	**10**	D08,J	20	5.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Benzene	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Bromodichloromethane	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Bromoform	ND	D08	4.0	1.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Bromomethane	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Carbon disulfide	ND	D08	4.0	0.78	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chlorobenzene	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chloroethane	**170**	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chloroform	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chloromethane	ND	D08	4.0	1.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
cis-1,2-Dichloroethene	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08	4.0	1.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Cyclohexane	ND	D08	4.0	2.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Ethylbenzene	ND	D08	4.0	0.74	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Isopropylbenzene	ND	D08	4.0	0.77	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methyl Acetate	ND	D08	4.0	2.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08	4.0	0.64	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methylcyclohexane	ND	D08	4.0	2.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methylene Chloride	ND	D08	4.0	1.8	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Styrene	ND	D08	4.0	0.74	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Tetrachloroethene	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Toluene	ND	D08	4.0	2.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
trans-1,2-Dichloroethene	ND	D08	4.0	1.7	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Trichloroethene	ND	D08	4.0	1.8	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03RE1 (GW-3 - Water) - cont.						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08	4.0	0.61	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Vinyl acetate	ND	D08	20	3.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Vinyl chloride	ND	D08	4.0	0.97	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Xylenes, total	ND	D08	8.0	2.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*95 %*	*D08*	*Surr Limits: (66-137%)*				*11/25/09 12:43*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*98 %*	*D08*	*Surr Limits: (73-120%)*				*11/25/09 12:43*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*94 %*	*D08*	*Surr Limits: (71-126%)*				*11/25/09 12:43*	*DHC*	*9K25014*	*8260B*

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Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-04 (GW-4 - Water)						**Sampled: 11/17/09 11:10**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1-Dichloroethane	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1-Dichloroethene	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND	P11	1.0	0.20	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloroethene, Total	ND	P11	2.0	0.70	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
2-Butanone (MEK)	ND	P11	5.0	1.3	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
2-Hexanone	ND	P11	5.0	1.2	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	P11	5.0	0.91	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Acetone	**5.0**	P11	5.0	1.3	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Benzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Bromoform	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Bromomethane	ND	P11	1.0	0.28	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Carbon disulfide	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Carbon Tetrachloride	ND	P11	1.0	0.27	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chlorobenzene	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chlorodibromomethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chloroethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chloromethane	ND	P11	1.0	0.35	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
cis-1,2-Dichloroethene	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Cyclohexane	ND	P11	1.0	0.53	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND	P11	1.0	0.16	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND	P11	1.0	0.42	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Trichloroethene	ND	P11	1.0	0.46	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-04 (GW-4 - Water) - cont.						**Sampled: 11/17/09 11:10**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11	1.0	0.15	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Vinyl chloride	ND	P11	1.0	0.24	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*95 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 19:08*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 19:08*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*96 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 19:08*	*DHC*	*9K24017*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05 (GW-6 - Water)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1-Dichloroethane	**0.80**	J	1.0	0.38	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND		1.0	0.17	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**4.7**		2.0	0.70	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
2-Butanone (MEK)	ND		5.0	1.3	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chlorodibromomethane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**4.7**		1.0	0.38	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Ethylbenzene	**1.9**		1.0	0.18	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND		1.0	0.16	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Tetrachloroethene	**500**	E	1.0	0.36	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Toluene	**46**		1.0	0.51	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Trichloroethene	**27**		1.0	0.46	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B

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Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05 (GW-6 - Water) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Vinyl acetate	ND		5.0	0.85	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Xylenes, total	**5.2**		2.0	0.66	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*95 %*		*Surr Limits: (66-137%)*				*11/24/09 19:32*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*		*Surr Limits: (73-120%)*				*11/24/09 19:32*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*92 %*		*Surr Limits: (71-126%)*				*11/24/09 19:32*	*DHC*	*9K24017*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05RE1 (GW-6 - Water)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08	10	2.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08	10	2.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08	10	2.3	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08	10	3.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1-Dichloroethane	ND	D08	10	3.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08	10	2.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08	10	4.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08	10	3.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08	10	1.7	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08	10	2.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08	10	2.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloroethene, Total	ND	D08	20	7.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08	10	3.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08	10	3.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08	50	13	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
2-Hexanone	ND	D08	50	12	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08	50	9.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Acetone	ND	D08	50	13	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Benzene	ND	D08	10	4.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Bromodichloromethane	ND	D08	10	3.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Bromoform	ND	D08	10	2.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Bromomethane	ND	D08	10	2.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Carbon disulfide	ND	D08	10	1.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08	10	2.7	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chlorobenzene	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chloroethane	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chloroform	ND	D08	10	3.4	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chloromethane	ND	D08	10	3.5	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
cis-1,2-Dichloroethene	**5.9**	D08,J	10	3.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08	10	3.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Cyclohexane	ND	D08	10	5.3	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08	10	2.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Ethylbenzene	ND	D08	10	1.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Isopropylbenzene	ND	D08	10	1.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methyl Acetate	ND	D08	10	5.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08	10	1.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methylcyclohexane	ND	D08	10	5.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methylene Chloride	ND	D08	10	4.4	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Styrene	ND	D08	10	1.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Tetrachloroethene	**620**	D08	10	3.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Toluene	**44**	D08	10	5.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
trans-1,2-Dichloroethene	ND	D08	10	4.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08	10	3.7	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Trichloroethene	**28**	D08	10	4.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05RE1 (GW-6 - Water) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08	10	1.5	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Vinyl acetate	ND	D08	50	8.5	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Vinyl chloride	ND	D08	10	2.4	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Xylenes, total	ND	D08	20	6.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*97 %*	*D08*	*Surr Limits: (66-137%)*				*11/25/09 13:07*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*98 %*	*D08*	*Surr Limits: (73-120%)*				*11/25/09 13:07*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*96 %*	*D08*	*Surr Limits: (71-126%)*				*11/25/09 13:07*	*DHC*	*9K25014*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06 (GW-5 - Water)						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	**3.5**		1.0	0.31	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1-Dichloroethane	**440**	E	1.0	0.38	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1-Dichloroethene	**2.2**		1.0	0.29	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND		1.0	0.17	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloroethene, Total	**100**		2.0	0.70	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
2-Butanone (MEK)	ND		5.0	1.3	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Acetone	**6.1**		5.0	1.3	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chlorodibromomethane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chloroethane	**120**	E	1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
cis-1,2-Dichloroethene	**100**		1.0	0.38	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND		1.0	0.16	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Tetrachloroethene	**1.5**		1.0	0.36	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Trichloroethene	**47**		1.0	0.46	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06 (GW-5 - Water) - cont.						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Vinyl acetate	ND		5.0	0.85	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Vinyl chloride	**22**		1.0	0.24	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Xylenes, total	ND		2.0	0.66	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*97 %*		*Surr Limits: (66-137%)*				*11/24/09 19:56*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*97 %*		*Surr Limits: (73-120%)*				*11/24/09 19:56*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*95 %*		*Surr Limits: (71-126%)*				*11/24/09 19:56*	*DHC*	*9K24017*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06RE1 (GW-5 - Water)						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08	8.0	2.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08	8.0	1.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08	8.0	1.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08	8.0	2.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1-Dichloroethane	**450**	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08	8.0	2.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08	8.0	3.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08	8.0	1.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08	8.0	1.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08	8.0	1.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloroethene, Total	**100**	D08	16	5.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08	8.0	2.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08	8.0	2.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08	40	11	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
2-Hexanone	ND	D08	40	9.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08	40	7.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Acetone	ND	D08	40	11	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Benzene	ND	D08	8.0	3.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Bromodichloromethane	ND	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Bromoform	ND	D08	8.0	2.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Bromomethane	ND	D08	8.0	2.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Carbon disulfide	ND	D08	8.0	1.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08	8.0	2.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chlorobenzene	ND	D08	8.0	2.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08	8.0	2.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chloroethane	**130**	D08	8.0	2.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chloroform	ND	D08	8.0	2.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chloromethane	ND	D08	8.0	2.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
cis-1,2-Dichloroethene	**100**	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08	8.0	2.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Cyclohexane	ND	D08	8.0	4.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08	8.0	2.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Ethylbenzene	ND	D08	8.0	1.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Isopropylbenzene	ND	D08	8.0	1.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methyl Acetate	ND	D08	8.0	4.0	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08	8.0	1.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methylcyclohexane	ND	D08	8.0	4.0	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methylene Chloride	ND	D08	8.0	3.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Styrene	ND	D08	8.0	1.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Tetrachloroethene	ND	D08	8.0	2.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Toluene	ND	D08	8.0	4.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
trans-1,2-Dichloroethene	ND	D08	8.0	3.4	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08	8.0	2.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Trichloroethene	**48**	D08	8.0	3.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B

ARCADIS U.S., Inc. - Albany, NY
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Work Order: RSK0991

Project: LMC - Utica Site
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Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06RE1 (GW-5 - Water) - cont.						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08	8.0	1.2	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Vinyl acetate	ND	D08	40	6.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Vinyl chloride	23	D08	8.0	1.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Xylenes, total	ND	D08	16	5.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*97 %*	*D08*	*Surr Limits: (66-137%)*				*11/25/09 13:32*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*96 %*	*D08*	*Surr Limits: (73-120%)*				*11/25/09 13:32*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*95 %*	*D08*	*Surr Limits: (71-126%)*				*11/25/09 13:32*	*DHC*	*9K25014*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07 (GW-6 (11-12) - Solid)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	W1	130	9.8	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1,2,2-Tetrachloroethane	ND	W1	130	22	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1,2-Trichloroethane	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1,2-Trichlorotrifluoroethane	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1-Dichloroethane	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1-Dichloroethene	ND	W1	130	16	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2,4-Trichlorobenzene	ND	W1	130	8.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dibromo-3-chloropropane	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dibromoethane (EDB)	ND	W1	130	5.1	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichlorobenzene	ND	W1	130	10	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichloroethane	ND	W1	130	6.8	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichloropropane	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,3-Dichlorobenzene	ND	W1	130	7.0	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,4-Dichlorobenzene	ND	W1	130	19	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
2-Butanone (MEK)	**510**	W1,J	670	48	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
2-Hexanone	ND	W1	670	46	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
4-Methyl-2-pentanone (MIBK)	ND	W1	670	43	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Acetone	ND	W1	670	30	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Benzene	ND	W1	130	6.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Bromodichloromethane	ND	W1	130	6.9	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Bromoform	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Bromomethane	ND	W1	130	30	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Carbon disulfide	ND	W1	130	12	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Carbon Tetrachloride	ND	W1	130	13	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chlorobenzene	ND	W1	130	18	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chlorodibromomethane	ND	W1	130	7.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chloroethane	ND	W1	130	57	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chloroform	ND	W1	130	8.3	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chloromethane	ND	W1	130	8.1	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
cis-1,2-Dichloroethene	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
cis-1,3-Dichloropropene	ND	W1	130	7.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Cyclohexane	ND	W1	130	6.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Dichlorodifluoromethane	ND	W1	130	11	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Ethylbenzene	**4200**	W1	130	9.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Isopropylbenzene	ND	W1	130	20	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methyl Acetate	ND	W1	130	7.3	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methyl tert-Butyl Ether	ND	W1	130	13	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methylcyclohexane	ND	W1	130	8.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methylene Chloride	ND	W1	130	27	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Styrene	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Tetrachloroethene	**170000**	W1,E	130	18	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Toluene	**10000**	W1	130	10	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
trans-1,2-Dichloroethene	ND	W1	130	14	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
trans-1,3-Dichloropropene	ND	W1	130	6.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Trichloroethene	**3100**	W1	130	9.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Trichlorofluoromethane	ND	W1	130	13	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07 (GW-6 (11-12) - Solid) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Vinyl chloride	ND	W1	270	16	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Xylenes, total	**15000**	W1	270	23	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichloroethane-d4	*133 %*	*W1*	*Surr Limits: (10-190%)*				*11/27/09 16:47*	*DHC*	*9K27033*	*8260B*
4-Bromofluorobenzene	*125 %*	*W1*	*Surr Limits: (10-190%)*				*11/27/09 16:47*	*DHC*	*9K27033*	*8260B*
Toluene-d8	*134 %*	*W1*	*Surr Limits: (10-190%)*				*11/27/09 16:47*	*DHC*	*9K27033*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07RE1 (GW-6 (11-12) - Solid)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08, W1, N1	6700	490	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1,2,2-Tetrachloroethane	ND	D08, W1, N1	6700	1100	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1,2-Trichloroethane	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1-Dichloroethane	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1-Dichloroethene	ND	D08, W1, N1	6700	820	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2,4-Trichlorobenzene	ND	D08, W1, N1	6700	410	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dibromo-3-chloropropane	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dibromoethane (EDB)	ND	D08, W1, N1	6700	260	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichlorobenzene	ND	D08, W1, N1	6700	520	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichloroethane	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichloropropane	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,3-Dichlorobenzene	ND	D08, W1, N1	6700	350	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,4-Dichlorobenzene	ND	D08, W1, N1	6700	940	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
2-Butanone (MEK)	ND	D08, W1, N1	34000	2400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
2-Hexanone	ND	D08, W1, N1	34000	2300	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08, W1, N1	34000	2200	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Acetone	ND	D08, W1, N1	34000	1500	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Benzene	ND	D08, W1, N1	6700	320	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Bromodichloromethane	ND	D08, W1, N1	6700	350	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Bromoform	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Bromomethane	ND	D08, W1, N1	6700	1500	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Carbon disulfide	ND	D08, W1, N1	6700	580	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Carbon Tetrachloride	ND	D08, W1, N1	6700	650	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chlorobenzene	ND	D08, W1, N1	6700	890	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chlorodibromomethane	ND	D08, W1, N1	6700	380	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07RE1 (GW-6 (11-12) - Solid) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Chloroethane	ND	D08, W1, N1	6700	2800	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chloroform	ND	D08, W1, N1	6700	410	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chloromethane	ND	D08, W1, N1	6700	410	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
cis-1,2-Dichloroethene	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
cis-1,3-Dichloropropene	ND	D08, W1, N1	6700	380	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Cyclohexane	ND	D08, W1, N1	6700	310	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Dichlorodifluoromethane	ND	D08, W1, N1	6700	550	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Ethylbenzene	**5000**	D08, W1, N1,J	6700	460	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Isopropylbenzene	ND	D08, W1, N1	6700	1000	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methyl Acetate	ND	D08, W1, N1	6700	360	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methyl tert-Butyl Ether	ND	D08, W1, N1	6700	660	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methylcyclohexane	ND	D08, W1, N1	6700	440	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methylene Chloride	ND	D08, W1, N1	6700	1300	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Styrene	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Tetrachloroethene	**290000**	D08, W1, N1	6700	900	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Toluene	**13000**	D08, W1, N1	6700	510	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
trans-1,2-Dichloroethene	ND	D08, W1, N1	6700	700	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
trans-1,3-Dichloropropene	ND	D08, W1, N1	6700	320	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Trichloroethene	**4000**	D08, W1, N1,J	6700	460	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Trichlorofluoromethane	ND	D08, W1, N1	6700	630	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Vinyl chloride	ND	D08, W1, N1	13000	820	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Xylenes, total	**15000**	D08, W1, N1	13000	1100	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichloroethane-d4	*126 %*	*D08, W1, N1*	*Surr Limits: (10-190%)*				*11/30/09 13:25*	*RJ*	*9K27033*	*8260B*
4-Bromofluorobenzene	*116 %*	*D08, W1, N1*	*Surr Limits: (10-190%)*				*11/30/09 13:25*	*RJ*	*9K27033*	*8260B*
Toluene-d8	*128 %*	*D08, W1, N1*	*Surr Limits: (10-190%)*				*11/30/09 13:25*	*RJ*	*9K27033*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-08 (TRIP BLANK - Water)						**Sampled: 11/19/09**			**Recvd: 11/20/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND		1.0	0.17	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
2-Butanone (MEK)	ND		5.0	1.3	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chlorodibromomethane	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND		1.0	0.16	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-08 (TRIP BLANK - Water) - cont.						**Sampled: 11/19/09**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Vinyl acetate	ND		5.0	0.85	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Xylenes, total	ND		2.0	0.66	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*95 %*		*Surr Limits: (66-137%)*				*11/24/09 20:21*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*		*Surr Limits: (73-120%)*				*11/24/09 20:21*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*95 %*		*Surr Limits: (71-126%)*				*11/24/09 20:21*	*DHC*	*9K24017*	*8260B*

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Reported: 01/12/10 13:15

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
Volatile Organic Compounds by EPA 8260B									
8260B	9K27033	RSK0991-07	5.14	g	500.00	mL	11/27/09 09:00	DHC	Methanol Prep
8260B	9K27033	RSK0991-07RE	5.14	g	500.00	mL	11/27/09 09:00	DHC	Methanol Prep
8260B	9K24017	RSK0991-01	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K25014	RSK0991-01RE	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K24017	RSK0991-02	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K24017	RSK0991-03	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K25014	RSK0991-03RE	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K24017	RSK0991-04	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K24017	RSK0991-05	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K25014	RSK0991-05RE	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K24017	RSK0991-06	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K25014	RSK0991-06RE	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS
8260B	9K24017	RSK0991-08	5.00	mL	5.00	mL	11/24/09 08:00	JRS	5030B MS

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Reported: 01/12/10 13:15

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 11/24/09 (Lab Number:9K24017-BLK1, Batch: 9K24017)											
1,1,1-Trichloroethane			1.0	0.26	ug/L	ND					
1,1,2,2-Tetrachloroethane			1.0	0.21	ug/L	ND					
1,1,2-Trichloroethane			1.0	0.23	ug/L	ND					
1,1,2-Trichlorotrifluoroethane			1.0	0.31	ug/L	ND					
1,1-Dichloroethane			1.0	0.38	ug/L	ND					
1,1-Dichloroethene			1.0	0.29	ug/L	ND					
1,2,4-Trichlorobenzene			1.0	0.41	ug/L	ND					
1,2-Dibromo-3-chloropropane			1.0	0.39	ug/L	ND					
1,2-Dibromoethane (EDB)			1.0	0.17	ug/L	ND					
1,2-Dichlorobenzene			1.0	0.20	ug/L	ND					
1,2-Dichloroethane			1.0	0.21	ug/L	ND					
1,2-Dichloroethene, Total			2.0	0.70	ug/L	ND					
1,2-Dichloropropane			1.0	0.32	ug/L	ND					
1,3-Dichlorobenzene			1.0	0.36	ug/L	ND					
1,4-Dichlorobenzene			1.0	0.39	ug/L	ND					
2-Butanone (MEK)			5.0	1.3	ug/L	ND					
2-Hexanone			5.0	1.2	ug/L	ND					
4-Methyl-2-pentanone (MIBK)			5.0	0.91	ug/L	ND					
Acetone			5.0	1.3	ug/L	ND					
Benzene			1.0	0.41	ug/L	ND					
Bromodichloromethane			1.0	0.39	ug/L	ND					
Bromoform			1.0	0.26	ug/L	ND					
Bromomethane			1.0	0.28	ug/L	ND					
Carbon disulfide			1.0	0.19	ug/L	ND					
Carbon Tetrachloride			1.0	0.27	ug/L	ND					
Chlorobenzene			1.0	0.32	ug/L	ND					
Chlorodibromomethane			1.0	0.32	ug/L	ND					
Chloroethane			1.0	0.32	ug/L	ND					
Chloroform			1.0	0.34	ug/L	ND					
Chloromethane			1.0	0.35	ug/L	ND					
cis-1,2-Dichloroethene			1.0	0.38	ug/L	ND					
cis-1,3-Dichloropropene			1.0	0.36	ug/L	ND					
Cyclohexane			1.0	0.53	ug/L	ND					
Dichlorodifluoromethane			1.0	0.29	ug/L	ND					
Ethylbenzene			1.0	0.18	ug/L	ND					

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Reported: 01/12/10 13:15

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 11/24/09 (Lab Number:9K24017-BLK1, Batch: 9K24017)											
Isopropylbenzene			1.0	0.19	ug/L	ND					
Methyl Acetate			1.0	0.50	ug/L	ND					
Methyl tert-Butyl Ether			1.0	0.16	ug/L	ND					
Methylcyclohexane			1.0	0.50	ug/L	ND					
Methylene Chloride			1.0	0.44	ug/L	ND					
Styrene			1.0	0.18	ug/L	ND					
Tetrachloroethene			1.0	0.36	ug/L	ND					
Toluene			1.0	0.51	ug/L	ND					
trans-1,2-Dichloroethene			1.0	0.42	ug/L	ND					
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND					
Trichloroethene			1.0	0.46	ug/L	ND					
Trichlorofluoromethane			1.0	0.15	ug/L	ND					
Vinyl acetate			5.0	0.85	ug/L	ND					
Vinyl chloride			1.0	0.24	ug/L	ND					
Xylenes, total			2.0	0.66	ug/L	ND					
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*97*	*66-137*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*100*	*73-120*			
Surrogate: Toluene-d8					*ug/L*		*95*	*71-126*			
LCS Analyzed: 11/24/09 (Lab Number:9K24017-BS1, Batch: 9K24017)											
1,1,1-Trichloroethane		25.0	1.0	0.26	ug/L	24.3	97	73-126			
1,1,2,2-Tetrachloroethane		25.0	1.0	0.21	ug/L	24.4	98	70-126			
1,1,2-Trichloroethane		25.0	1.0	0.23	ug/L	24.0	96	76-122			
1,1,2-Trichlorotrifluoroethane		25.0	1.0	0.31	ug/L	23.2	93	60-140			
1,1-Dichloroethane		25.0	1.0	0.38	ug/L	24.0	96	71-129			
1,1-Dichloroethene		25.0	1.0	0.29	ug/L	23.6	94	65-138			
1,2,4-Trichlorobenzene		25.0	1.0	0.41	ug/L	23.2	93	70-122			
1,2-Dibromo-3-chloropropane		25.0	1.0	0.39	ug/L	22.2	89	56-134			
1,2-Dibromoethane (EDB)		25.0	1.0	0.17	ug/L	24.2	97	77-120			
1,2-Dichlorobenzene		25.0	1.0	0.20	ug/L	22.9	92	77-120			
1,2-Dichloroethane		25.0	1.0	0.21	ug/L	23.9	96	75-127			
1,2-Dichloroethene, Total		50.0	2.0	0.70	ug/L	47.2	94	72-124			
1,2-Dichloropropane		25.0	1.0	0.32	ug/L	23.7	95	76-120			
1,3-Dichlorobenzene		25.0	1.0	0.36	ug/L	22.8	91	77-120			
1,4-Dichlorobenzene		25.0	1.0	0.39	ug/L	22.6	91	75-120			

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Reported: 01/12/10 13:15

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
LCS Analyzed: 11/24/09 (Lab Number:9K24017-BS1, Batch: 9K24017)											
2-Butanone (MEK)		125	5.0	1.3	ug/L	129	103	57-140			
2-Hexanone		125	5.0	1.2	ug/L	132	106	65-127			
4-Methyl-2-pentanone (MIBK)		125	5.0	0.91	ug/L	131	105	71-125			
Acetone		125	5.0	1.3	ug/L	124	99	56-142			
Benzene		25.0	1.0	0.41	ug/L	23.7	95	71-124			
Bromodichloromethane		25.0	1.0	0.39	ug/L	25.1	100	80-122			
Bromoform		25.0	1.0	0.26	ug/L	18.8	75	66-128			
Bromomethane		25.0	1.0	0.28	ug/L	24.3	97	36-150			
Carbon disulfide		25.0	1.0	0.19	ug/L	23.3	93	59-134			
Carbon Tetrachloride		25.0	1.0	0.27	ug/L	24.4	98	72-134			
Chlorobenzene		25.0	1.0	0.32	ug/L	23.0	92	72-120			
Chlorodibromomethane		25.0	1.0	0.32	ug/L	22.3	89	75-125			
Chloroethane		25.0	1.0	0.32	ug/L	23.9	96	69-136			
Chloroform		25.0	1.0	0.34	ug/L	23.9	95	73-127			
Chloromethane		25.0	1.0	0.35	ug/L	24.1	96	49-142			
cis-1,2-Dichloroethene		25.0	1.0	0.38	ug/L	23.6	94	74-124			
cis-1,3-Dichloropropene		25.0	1.0	0.36	ug/L	25.3	101	74-124			
Cyclohexane		25.0	1.0	0.53	ug/L	23.8	95	70-130			
Dichlorodifluoromethane		25.0	1.0	0.29	ug/L	23.0	92	33-157			
Ethylbenzene		25.0	1.0	0.18	ug/L	23.6	94	77-123			
Isopropylbenzene		25.0	1.0	0.19	ug/L	23.1	92	77-122			
Methyl Acetate		25.0	1.0	0.50	ug/L	26.8	107	60-140			
Methyl tert-Butyl Ether		25.0	1.0	0.16	ug/L	24.5	98	64-127			
Methylcyclohexane		25.0	1.0	0.50	ug/L	23.8	95	60-140			
Methylene Chloride		25.0	1.0	0.44	ug/L	23.4	94	57-132			
Styrene		25.0	1.0	0.18	ug/L	24.0	96	70-130			
Tetrachloroethene		25.0	1.0	0.36	ug/L	23.4	94	74-122			
Toluene		25.0	1.0	0.51	ug/L	23.3	93	70-122			
trans-1,2-Dichloroethene		25.0	1.0	0.42	ug/L	23.6	95	73-127			
trans-1,3-Dichloropropene		25.0	1.0	0.37	ug/L	25.1	100	72-123			
Trichloroethene		25.0	1.0	0.46	ug/L	23.6	94	74-123			
Trichlorofluoromethane		25.0	1.0	0.15	ug/L	24.0	96	62-152			
Vinyl acetate		125	5.0	0.85	ug/L	131	105	50-144			
Vinyl chloride		25.0	1.0	0.24	ug/L	23.7	95	65-133			
Xylenes, total		75.0	2.0	0.66	ug/L	70.6	94	76-122			
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*96*	*66-137*			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
LCS Analyzed: 11/24/09 (Lab Number:9K24017-BS1, Batch: 9K24017)											
Surrogate: 4-Bromofluorobenzene					*ug/L*		*103*	*73-120*			
Surrogate: Toluene-d8					*ug/L*		*97*	*71-126*			
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 11/25/09 (Lab Number:9K25014-BLK1, Batch: 9K25014)											
1,1,1-Trichloroethane			1.0	0.26	ug/L	ND					
1,1,2,2-Tetrachloroethane			1.0	0.21	ug/L	ND					
1,1,2-Trichloroethane			1.0	0.23	ug/L	ND					
1,1,2-Trichlorotrifluoroethane			1.0	0.31	ug/L	ND					
1,1-Dichloroethane			1.0	0.38	ug/L	ND					
1,1-Dichloroethene			1.0	0.29	ug/L	ND					
1,2,4-Trichlorobenzene			1.0	0.41	ug/L	ND					
1,2-Dibromo-3-chloropropane			1.0	0.39	ug/L	ND					
1,2-Dibromoethane (EDB)			1.0	0.17	ug/L	ND					
1,2-Dichlorobenzene			1.0	0.20	ug/L	ND					
1,2-Dichloroethane			1.0	0.21	ug/L	ND					
1,2-Dichloroethene, Total			2.0	0.70	ug/L	ND					
1,2-Dichloropropane			1.0	0.32	ug/L	ND					
1,3-Dichlorobenzene			1.0	0.36	ug/L	ND					
1,4-Dichlorobenzene			1.0	0.39	ug/L	ND					
2-Butanone (MEK)			5.0	1.3	ug/L	ND					
2-Hexanone			5.0	1.2	ug/L	ND					
4-Methyl-2-pentanone (MIBK)			5.0	0.91	ug/L	ND					
Acetone			5.0	1.3	ug/L	ND					
Benzene			1.0	0.41	ug/L	ND					
Bromodichloromethane			1.0	0.39	ug/L	ND					
Bromoform			1.0	0.26	ug/L	ND					
Bromomethane			1.0	0.28	ug/L	ND					
Carbon disulfide			1.0	0.19	ug/L	ND					
Carbon Tetrachloride			1.0	0.27	ug/L	ND					
Chlorobenzene			1.0	0.32	ug/L	ND					
Chlorodibromomethane			1.0	0.32	ug/L	ND					
Chloroethane			1.0	0.32	ug/L	ND					
Chloroform			1.0	0.34	ug/L	ND					
Chloromethane			1.0	0.35	ug/L	ND					

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 11/25/09 (Lab Number:9K25014-BLK1, Batch: 9K25014)											
cis-1,2-Dichloroethene			1.0	0.38	ug/L	ND					
cis-1,3-Dichloropropene			1.0	0.36	ug/L	ND					
Cyclohexane			1.0	0.53	ug/L	ND					
Dichlorodifluoromethane			1.0	0.29	ug/L	ND					
Ethylbenzene			1.0	0.18	ug/L	ND					
Isopropylbenzene			1.0	0.19	ug/L	ND					
Methyl Acetate			1.0	0.50	ug/L	ND					
Methyl tert-Butyl Ether			1.0	0.16	ug/L	ND					
Methylcyclohexane			1.0	0.50	ug/L	ND					
Methylene Chloride			1.0	0.44	ug/L	ND					
Styrene			1.0	0.18	ug/L	ND					
Tetrachloroethene			1.0	0.36	ug/L	ND					
Toluene			1.0	0.51	ug/L	ND					
trans-1,2-Dichloroethene			1.0	0.42	ug/L	ND					
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND					
Trichloroethene			1.0	0.46	ug/L	ND					
Trichlorofluoromethane			1.0	0.15	ug/L	ND					
Vinyl acetate			5.0	0.85	ug/L	ND					
Vinyl chloride			1.0	0.24	ug/L	ND					
Xylenes, total			2.0	0.66	ug/L	ND					
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*96*	*66-137*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*97*	*73-120*			
Surrogate: Toluene-d8					*ug/L*		*95*	*71-126*			
LCS Analyzed: 11/25/09 (Lab Number:9K25014-BS1, Batch: 9K25014)											
1,1,1-Trichloroethane		25.0	1.0	0.26	ug/L	25.0	100	73-126			
1,1,2,2-Tetrachloroethane		25.0	1.0	0.21	ug/L	23.2	93	70-126			
1,1,2-Trichloroethane		25.0	1.0	0.23	ug/L	23.9	96	76-122			
1,1,2-Trichlorotrifluoroethane		25.0	1.0	0.31	ug/L	24.2	97	60-140			
1,1-Dichloroethane		25.0	1.0	0.38	ug/L	24.7	99	71-129			
1,1-Dichloroethene		25.0	1.0	0.29	ug/L	24.5	98	65-138			
1,2,4-Trichlorobenzene		25.0	1.0	0.41	ug/L	23.2	93	70-122			
1,2-Dibromo-3-chloropropane		25.0	1.0	0.39	ug/L	20.1	81	56-134			
1,2-Dibromoethane (EDB)		25.0	1.0	0.17	ug/L	23.9	95	77-120			
1,2-Dichlorobenzene		25.0	1.0	0.20	ug/L	23.6	94	77-120			

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Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
LCS Analyzed: 11/25/09 (Lab Number: 9K25014-BS1, Batch: 9K25014)											
1,2-Dichloroethane		25.0	1.0	0.21	ug/L	24.3	97	75-127			
1,2-Dichloroethene, Total		50.0	2.0	0.70	ug/L	48.7	97	72-124			
1,2-Dichloropropane		25.0	1.0	0.32	ug/L	24.8	99	76-120			
1,3-Dichlorobenzene		25.0	1.0	0.36	ug/L	23.7	95	77-120			
1,4-Dichlorobenzene		25.0	1.0	0.39	ug/L	23.5	94	75-120			
2-Butanone (MEK)		125	5.0	1.3	ug/L	117	94	57-140			
2-Hexanone		125	5.0	1.2	ug/L	120	96	65-127			
4-Methyl-2-pentanone (MIBK)		125	5.0	0.91	ug/L	120	96	71-125			
Acetone		125	5.0	1.3	ug/L	112	90	56-142			
Benzene		25.0	1.0	0.41	ug/L	24.4	98	71-124			
Bromodichloromethane		25.0	1.0	0.39	ug/L	26.0	104	80-122			
Bromoform		25.0	1.0	0.26	ug/L	17.8	71	66-128			
Bromomethane		25.0	1.0	0.28	ug/L	22.9	91	36-150			
Carbon disulfide		25.0	1.0	0.19	ug/L	23.9	96	59-134			
Carbon Tetrachloride		25.0	1.0	0.27	ug/L	25.4	102	72-134			
Chlorobenzene		25.0	1.0	0.32	ug/L	23.6	94	72-120			
Chlorodibromomethane		25.0	1.0	0.32	ug/L	22.7	91	75-125			
Chloroethane		25.0	1.0	0.32	ug/L	24.2	97	69-136			
Chloroform		25.0	1.0	0.34	ug/L	24.5	98	73-127			
Chloromethane		25.0	1.0	0.35	ug/L	24.7	99	49-142			
cis-1,2-Dichloroethene		25.0	1.0	0.38	ug/L	24.4	98	74-124			
cis-1,3-Dichloropropene		25.0	1.0	0.36	ug/L	25.8	103	74-124			
Cyclohexane		25.0	1.0	0.53	ug/L	24.6	98	70-130			
Dichlorodifluoromethane		25.0	1.0	0.29	ug/L	21.4	85	33-157			
Ethylbenzene		25.0	1.0	0.18	ug/L	24.0	96	77-123			
Isopropylbenzene		25.0	1.0	0.19	ug/L	23.7	95	77-122			
Methyl Acetate		25.0	1.0	0.50	ug/L	24.9	100	60-140			
Methyl tert-Butyl Ether		25.0	1.0	0.16	ug/L	23.8	95	64-127			
Methylcyclohexane		25.0	1.0	0.50	ug/L	24.3	97	60-140			
Methylene Chloride		25.0	1.0	0.44	ug/L	23.8	95	57-132			
Styrene		25.0	1.0	0.18	ug/L	24.5	98	70-130			
Tetrachloroethene		25.0	1.0	0.36	ug/L	23.8	95	74-122			
Toluene		25.0	1.0	0.51	ug/L	24.0	96	70-122			
trans-1,2-Dichloroethene		25.0	1.0	0.42	ug/L	24.3	97	73-127			
trans-1,3-Dichloropropene		25.0	1.0	0.37	ug/L	25.2	101	72-123			
Trichloroethene		25.0	1.0	0.46	ug/L	24.4	98	74-123			
Trichlorofluoromethane		25.0	1.0	0.15	ug/L	25.2	101	62-152			

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
LCS Analyzed: 11/25/09 (Lab Number:9K25014-BS1, Batch: 9K25014)											
Vinyl acetate		125	5.0	0.85	ug/L	126	100	50-144			
Vinyl chloride		25.0	1.0	0.24	ug/L	23.6	94	65-133			
Xylenes, total		75.0	2.0	0.66	ug/L	71.7	96	76-122			
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*94*	*66-137*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*102*	*73-120*			
Surrogate: Toluene-d8					*ug/L*		*97*	*71-126*			
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 11/27/09 (Lab Number:9K27033-BLK1, Batch: 9K27033)											
1,1,1-Trichloroethane			99	7.2	ug/kg wet	ND					
1,1,2,2-Tetrachloroethane			99	16	ug/kg wet	ND					
1,1,2-Trichloroethane			99	4.9	ug/kg wet	ND					
1,1,2-Trichlorotrifluoroethane			99	49	ug/kg wet	ND					
1,1-Dichloroethane			99	4.9	ug/kg wet	ND					
1,1-Dichloroethene			99	12	ug/kg wet	ND					
1,2,4-Trichlorobenzene			99	6.0	ug/kg wet	ND					
1,2-Dibromo-3-chloropropane			99	49	ug/kg wet	ND					
1,2-Dibromoethane (EDB)			99	3.8	ug/kg wet	ND					
1,2-Dichlorobenzene			99	7.7	ug/kg wet	ND					
1,2-Dichloroethane			99	5.0	ug/kg wet	ND					
1,2-Dichloropropane			99	49	ug/kg wet	ND					
1,3-Dichlorobenzene			99	5.1	ug/kg wet	ND					
1,4-Dichlorobenzene			99	14	ug/kg wet	ND					
2-Butanone (MEK)			490	36	ug/kg wet	ND					
2-Hexanone			490	34	ug/kg wet	ND					
4-Methyl-2-pentanone (MIBK)			490	32	ug/kg wet	ND					
Acetone			490	22	ug/kg wet	ND					
Benzene			99	4.7	ug/kg wet	ND					
Bromodichloromethane			99	5.1	ug/kg wet	ND					
Bromoform			99	49	ug/kg wet	ND					
Bromomethane			99	22	ug/kg wet	ND					
Carbon disulfide			99	8.5	ug/kg wet	ND					
Carbon Tetrachloride			99	9.5	ug/kg wet	ND					
Chlorobenzene			99	13	ug/kg wet	ND					

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LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 11/27/09 (Lab Number:9K27033-BLK1, Batch: 9K27033)											
Chlorodibromomethane			99	5.5	ug/kg wet	ND					
Chloroethane			99	42	ug/kg wet	ND					
Chloroform			99	6.1	ug/kg wet	ND					
Chloromethane			99	6.0	ug/kg wet	ND					
cis-1,2-Dichloroethene			99	4.9	ug/kg wet	ND					
cis-1,3-Dichloropropene			99	5.5	ug/kg wet	ND					
Cyclohexane			99	4.5	ug/kg wet	ND					
Dichlorodifluoromethane			99	8.1	ug/kg wet	ND					
Ethylbenzene			99	6.7	ug/kg wet	ND					
Isopropylbenzene			99	15	ug/kg wet	ND					
Methyl Acetate			99	5.3	ug/kg wet	ND					
Methyl tert-Butyl Ether			99	9.7	ug/kg wet	ND					
Methylcyclohexane			99	6.4	ug/kg wet	ND					
Methylene Chloride			99	20	ug/kg wet	ND					
Styrene			99	4.9	ug/kg wet	ND					
Tetrachloroethene			99	13	ug/kg wet	ND					
Toluene			99	7.5	ug/kg wet	ND					
trans-1,2-Dichloroethene			99	10	ug/kg wet	ND					
trans-1,3-Dichloropropene			99	4.7	ug/kg wet	ND					
Trichloroethene			99	6.7	ug/kg wet	ND					
Trichlorofluoromethane			99	9.3	ug/kg wet	ND					
Vinyl chloride			200	12	ug/kg wet	ND					
Xylenes, total			200	17	ug/kg wet	ND					
Surrogate: 1,2-Dichloroethane-d4					*ug/kg wet*		*140*	*10-190*			
Surrogate: 4-Bromofluorobenzene					*ug/kg wet*		*128*	*10-190*			
Surrogate: Toluene-d8					*ug/kg wet*		*139*	*10-190*			
LCS Analyzed: 11/27/09 (Lab Number:9K27033-BS1, Batch: 9K27033)											
1,1-Dichloroethene		2460	98	12	ug/kg wet	2780	113	10-190			
Benzene		2460	98	4.7	ug/kg wet	2610	106	10-190			
Chlorobenzene		2460	98	13	ug/kg wet	2500	102	10-190			
Toluene		2460	98	7.5	ug/kg wet	2530	103	10-190			
Trichloroethene		2460	98	6.7	ug/kg wet	2620	107	10-190			
Surrogate: 1,2-Dichloroethane-d4					*ug/kg wet*		*139*	*10-190*			
Surrogate: 4-Bromofluorobenzene					*ug/kg wet*		*128*	*10-190*			

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

LABORATORY QC DATA

Analyte	Source Result	Spike Level	MRL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
LCS Analyzed: 11/27/09 (Lab Number: 9K27033-BS1, Batch: 9K27033)											
Surrogate: Toluene-d8					*ug/kg wet*		*139*	*10-190*			

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client: Arcadis for LMC Utica	Project Manager: Jeff Bonstead	Date: 11/19/09	Chain of Custody Number: 391904
Address: French Road	Telephone Number (Area Code)/Fax Number	Lab Number: NY9A4463	Page 1 of 1
City: New Hartford/Utica / State: NY / Zip Code: 13413	Site Contact: Dan Zuck	Lab Contact: K.L. Fox	Analysis (Attach list if more space is needed)
Project Name and Location (State): LMC Utica, NY	Carrier/Waybill Number: ~~FedEx~~ UPS 1247-244-8750		
Contract/Purchase Order/Quote No: NJ000637.0001.00002	Matrix / Containers & Preservatives		Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed	Soil	Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	VOCs 4260	VOCs 8260B
GW-1	11/16/09	1345		X						3			X	
GW-2	11/17/09	0840		X						3			X	
GW-3	11/17/09	0902		X						3			X	
GW-4	11/17/09	1110		X						3			X	
GW-6	11/16/09	1115		X						3			X	
GW-6 [11-712]	11/16/09	1115				X		X						X
TB	11/19/09	—		X						3			X	
GW-5	11/19/09	1125		X						3			X	

45/328

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 Day TAT

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	11/19/09	1655	1. Received By: DHL	11-20-09	1050
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

2.0°C

DISTRIBUTION: WHITE - Returned to Client with Report. CANARY - Stays with the Sample. PINK - Field Copy

TestAmerica Buffalo
SDG:
CLASS: VOA
METHOD: 8260B

ANALYSES DATA PACKAGE COVER PAGE

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis G&M, Inc. - NY9A8463.4

Client Sample Id:	Lab Sample Id:
GW-1	RSK0991-01
GW-2	RSK0991-02
GW-3	RSK0991-03
GW-4	RSK0991-04
GW-6	RSK0991-05
GW-5	RSK0991-06
GW-6 (11-12)	RSK0991-07
TRIP BLANK	RSK0991-08

Form 2
SURROGATE STANDARD RECOVERY AND RT SUMMARY
8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92405	Instrument:	HP5973S
Matrix:	Water	Calibration:	R9K2009

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Blank (9K24017-BLK1)			Lab File ID: S1103.D		Analyzed: 11/24/09 11:24			
1,2-Dichloroethane-d4	25.0	97	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	100	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.07	6.07	0.0000	+/-1.0	
LCS (9K24017-BS1)			Lab File ID: S1100.D		Analyzed: 11/24/09 10:10			
1,2-Dichloroethane-d4	25.0	96	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	103	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	97	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-1 (RSK0991-01)			Lab File ID: S1118.D		Analyzed: 11/24/09 17:55			
1,2-Dichloroethane-d4	25.0	99	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-2 (RSK0991-02)			Lab File ID: S1119.D		Analyzed: 11/24/09 18:19			
1,2-Dichloroethane-d4	25.0	98	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	96	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	94	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-3 (RSK0991-03)			Lab File ID: S1120.D		Analyzed: 11/24/09 18:44			
1,2-Dichloroethane-d4	25.0	96	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	96	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	92	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-4 (RSK0991-04)			Lab File ID: S1121.D		Analyzed: 11/24/09 19:08			
1,2-Dichloroethane-d4	25.0	95	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	96	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-6 (RSK0991-05)			Lab File ID: S1122.D		Analyzed: 11/24/09 19:32			
1,2-Dichloroethane-d4	25.0	95	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	92	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-5 (RSK0991-06)			Lab File ID: S1123.D		Analyzed: 11/24/09 19:56			
1,2-Dichloroethane-d4	25.0	97	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	97	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.07	6.07	0.0000	+/-1.0	

Form 2
SURROGATE STANDARD RECOVERY AND RT SUMMARY
8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92405	Instrument:	HP5973S
Matrix:	Water	Calibration:	R9K2009

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
TRIP BLANK (RSK0991-08)			Lab File ID: S1124.D		Analyzed: 11/24/09 20:21			
1,2-Dichloroethane-d4	25.0	95	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.07	6.07	0.0000	+/-1.0	

Form 2
SURROGATE STANDARD RECOVERY AND RT SUMMARY
8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92506	Instrument:	HP5973S
Matrix:	Water	Calibration:	R9K2009

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Blank (9K25014-BLK1)			Lab File ID: S1133.D		Analyzed: 11/25/09 11:51			
1,2-Dichloroethane-d4	25.0	96	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	97	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.07	6.07	0.0000	+/-1.0	
LCS (9K25014-BS1)			Lab File ID: S1130.D		Analyzed: 11/25/09 10:20			
1,2-Dichloroethane-d4	25.0	94	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	102	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	97	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-1 (RSK0991-01RE1)			Lab File ID: S1134.D		Analyzed: 11/25/09 12:19			
1,2-Dichloroethane-d4	25.0	96	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-3 (RSK0991-03RE1)			Lab File ID: S1135.D		Analyzed: 11/25/09 12:43			
1,2-Dichloroethane-d4	25.0	95	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	94	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-6 (RSK0991-05RE1)			Lab File ID: S1136.D		Analyzed: 11/25/09 13:07			
1,2-Dichloroethane-d4	25.0	97	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	96	71 - 126	6.07	6.07	0.0000	+/-1.0	
GW-5 (RSK0991-06RE1)			Lab File ID: S1137.D		Analyzed: 11/25/09 13:32			
1,2-Dichloroethane-d4	25.0	97	66 - 137	4.69	4.69	0.0000	+/-1.0	
4-Bromofluorobenzene	25.0	96	73 - 120	8.12	8.12	0.0000	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.07	6.07	0.0000	+/-1.0	

Form 2
SURROGATE STANDARD RECOVERY AND RT SUMMARY
8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92704	Instrument:	HP5973G
Matrix:	Solid-extr	Calibration:	R9K1805

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
GW-6 (11-12) (RSK0991-07)			Lab File ID: G6475.D		Analyzed: 11/27/09 16:47			
1,2-Dichloroethane-d4	3360	133	10 - 190	5.06	5.06	0.0000	+/-1.0	
4-Bromofluorobenzene	3360	125	10 - 190	9.58	9.58	0.0000	+/-1.0	
Toluene-d8	3360	134	10 - 190	6.85	6.85	0.0000	+/-1.0	

Form 2
SURROGATE STANDARD RECOVERY AND RT SUMMARY
8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92704	Instrument:	HP5973G
Matrix:	Solid-extr	Calibration:	R9K1805

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Blank (9K27033-BLK1)			Lab File ID: G6467.D		Analyzed: 11/27/09 13:35			
1,2-Dichloroethane-d4	2470	140	10 - 190	5.06	5.06	0.0000	+/-1.0	
4-Bromofluorobenzene	2470	128	10 - 190	9.58	9.58	0.0000	+/-1.0	
Toluene-d8	2470	139	10 - 190	6.85	6.85	0.0000	+/-1.0	
LCS (9K27033-BS1)			Lab File ID: G6466.D		Analyzed: 11/27/09 13:13			
1,2-Dichloroethane-d4	2460	139	10 - 190	5.06	5.06	0.0000	+/-1.0	
4-Bromofluorobenzene	2460	128	10 - 190	9.58	9.58	0.0000	+/-1.0	
Toluene-d8	2460	139	10 - 190	6.85	6.85	0.0000	+/-1.0	

Form 2
SURROGATE STANDARD RECOVERY AND RT SUMMARY
8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK93007	Instrument:	HP5973G
Matrix:	Solid-extr	Calibration:	R9K1805

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
GW-6 (11-12) (RSK0991-07RE1)			Lab File ID: G6509.D		Analyzed: 11/30/09 13:25			
1,2-Dichloroethane-d4	3360	126	10 - 190	5.06	5.06	0.0000	+/-1.0	
4-Bromofluorobenzene	3360	116	10 - 190	9.58	9.58	0.0000	+/-1.0	
Toluene-d8	3360	128	10 - 190	6.85	6.85	0.0000	+/-1.0	

Form 3

LCS / LCS DUPLICATE RECOVERY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Spike standard:	9111359
Batch:	9K24017	Laboratory ID:	9K24017-BS1
Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
1,1,1-Trichloroethane	25.0	ug/L	24.3	97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	ug/L	24.4	98	70 - 126
1,1,2-Trichloroethane	25.0	ug/L	24.0	96	76 - 122
1,1,2-Trichlorotrifluoroethane	25.0	ug/L	23.2	93	60 - 140
1,1-Dichloroethane	25.0	ug/L	24.0	96	71 - 129
1,1-Dichloroethene	25.0	ug/L	23.6	94	65 - 138
1,2,4-Trichlorobenzene	25.0	ug/L	23.2	93	70 - 122
1,2-Dibromo-3-chloropropane	25.0	ug/L	22.2	89	56 - 134
1,2-Dibromoethane (EDB)	25.0	ug/L	24.2	97	77 - 120
1,2-Dichlorobenzene	25.0	ug/L	22.9	92	77 - 120
1,2-Dichloroethane	25.0	ug/L	23.9	96	75 - 127
1,2-Dichloroethene, Total	50.0	ug/L	47.2	94	72 - 124
1,2-Dichloropropane	25.0	ug/L	23.7	95	76 - 120
1,3-Dichlorobenzene	25.0	ug/L	22.8	91	77 - 120
1,4-Dichlorobenzene	25.0	ug/L	22.6	91	75 - 120
2-Butanone (MEK)	125	ug/L	129	103	57 - 140
2-Hexanone	125	ug/L	132	106	65 - 127
4-Methyl-2-pentanone (MIBK)	125	ug/L	131	105	71 - 125
Acetone	125	ug/L	124	99	56 - 142
Benzene	25.0	ug/L	23.7	95	71 - 124
Bromodichloromethane	25.0	ug/L	25.1	100	80 - 122
Bromoform	25.0	ug/L	18.8	75	66 - 128
Bromomethane	25.0	ug/L	24.3	97	36 - 150
Carbon disulfide	25.0	ug/L	23.3	93	59 - 134
Carbon Tetrachloride	25.0	ug/L	24.4	98	72 - 134
Chlorobenzene	25.0	ug/L	23.0	92	72 - 120
Chlorodibromomethane	25.0	ug/L	22.3	89	75 - 125
Chloroethane	25.0	ug/L	23.9	96	69 - 136
Chloroform	25.0	ug/L	23.9	95	73 - 127
Chloromethane	25.0	ug/L	24.1	96	49 - 142

Form 3

LCS / LCS DUPLICATE RECOVERY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Spike standard:	9111359
Batch:	9K24017	Laboratory ID:	9K24017-BS1
Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
cis-1,2-Dichloroethene	25.0	ug/L	23.6	94	74 - 124
cis-1,3-Dichloropropene	25.0	ug/L	25.3	101	74 - 124
Cyclohexane	25.0	ug/L	23.8	95	70 - 130
Dichlorodifluoromethane	25.0	ug/L	23.0	92	33 - 157
Ethylbenzene	25.0	ug/L	23.6	94	77 - 123
Isopropylbenzene	25.0	ug/L	23.1	92	77 - 122
Methyl Acetate	25.0	ug/L	26.8	107	60 - 140
Methyl tert-Butyl Ether	25.0	ug/L	24.5	98	64 - 127
Methylcyclohexane	25.0	ug/L	23.8	95	60 - 140
Methylene Chloride	25.0	ug/L	23.4	94	57 - 132
Styrene	25.0	ug/L	24.0	96	70 - 130
Tetrachloroethene	25.0	ug/L	23.4	94	74 - 122
Toluene	25.0	ug/L	23.3	93	70 - 122
trans-1,2-Dichloroethene	25.0	ug/L	23.6	95	73 - 127
trans-1,3-Dichloropropene	25.0	ug/L	25.1	100	72 - 123
Trichloroethene	25.0	ug/L	23.6	94	74 - 123
Trichlorofluoromethane	25.0	ug/L	24.0	96	62 - 152
Vinyl acetate	125	ug/L	131	105	50 - 144
Vinyl chloride	25.0	ug/L	23.7	95	65 - 133
Xylenes, total	75.0	ug/L	70.6	94	76 - 122

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Form 3

LCS / LCS DUPLICATE RECOVERY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Spike standard:	9111359
Batch:	9K25014	Laboratory ID:	9K25014-BS1
Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
1,1,1-Trichloroethane	25.0	ug/L	25.0	100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	ug/L	23.2	93	70 - 126
1,1,2-Trichloroethane	25.0	ug/L	23.9	96	76 - 122
1,1,2-Trichlorotrifluoroethane	25.0	ug/L	24.2	97	60 - 140
1,1-Dichloroethane	25.0	ug/L	24.7	99	71 - 129
1,1-Dichloroethene	25.0	ug/L	24.5	98	65 - 138
1,2,4-Trichlorobenzene	25.0	ug/L	23.2	93	70 - 122
1,2-Dibromo-3-chloropropane	25.0	ug/L	20.1	81	56 - 134
1,2-Dibromoethane (EDB)	25.0	ug/L	23.9	95	77 - 120
1,2-Dichlorobenzene	25.0	ug/L	23.6	94	77 - 120
1,2-Dichloroethane	25.0	ug/L	24.3	97	75 - 127
1,2-Dichloroethene, Total	50.0	ug/L	48.7	97	72 - 124
1,2-Dichloropropane	25.0	ug/L	24.8	99	76 - 120
1,3-Dichlorobenzene	25.0	ug/L	23.7	95	77 - 120
1,4-Dichlorobenzene	25.0	ug/L	23.5	94	75 - 120
2-Butanone (MEK)	125	ug/L	117	94	57 - 140
2-Hexanone	125	ug/L	120	96	65 - 127
4-Methyl-2-pentanone (MIBK)	125	ug/L	120	96	71 - 125
Acetone	125	ug/L	112	90	56 - 142
Benzene	25.0	ug/L	24.4	98	71 - 124
Bromodichloromethane	25.0	ug/L	26.0	104	80 - 122
Bromoform	25.0	ug/L	17.8	71	66 - 128
Bromomethane	25.0	ug/L	22.9	91	36 - 150
Carbon disulfide	25.0	ug/L	23.9	96	59 - 134
Carbon Tetrachloride	25.0	ug/L	25.4	102	72 - 134
Chlorobenzene	25.0	ug/L	23.6	94	72 - 120
Chlorodibromomethane	25.0	ug/L	22.7	91	75 - 125
Chloroethane	25.0	ug/L	24.2	97	69 - 136
Chloroform	25.0	ug/L	24.5	98	73 - 127
Chloromethane	25.0	ug/L	24.7	99	49 - 142

Form 3

LCS / LCS DUPLICATE RECOVERY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Spike standard:	9111359
Batch:	9K25014	Laboratory ID:	9K25014-BS1
Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
cis-1,2-Dichloroethene	25.0	ug/L	24.4	98	74 - 124
cis-1,3-Dichloropropene	25.0	ug/L	25.8	103	74 - 124
Cyclohexane	25.0	ug/L	24.6	98	70 - 130
Dichlorodifluoromethane	25.0	ug/L	21.4	85	33 - 157
Ethylbenzene	25.0	ug/L	24.0	96	77 - 123
Isopropylbenzene	25.0	ug/L	23.7	95	77 - 122
Methyl Acetate	25.0	ug/L	24.9	100	60 - 140
Methyl tert-Butyl Ether	25.0	ug/L	23.8	95	64 - 127
Methylcyclohexane	25.0	ug/L	24.3	97	60 - 140
Methylene Chloride	25.0	ug/L	23.8	95	57 - 132
Styrene	25.0	ug/L	24.5	98	70 - 130
Tetrachloroethene	25.0	ug/L	23.8	95	74 - 122
Toluene	25.0	ug/L	24.0	96	70 - 122
trans-1,2-Dichloroethene	25.0	ug/L	24.3	97	73 - 127
trans-1,3-Dichloropropene	25.0	ug/L	25.2	101	72 - 123
Trichloroethene	25.0	ug/L	24.4	98	74 - 123
Trichlorofluoromethane	25.0	ug/L	25.2	101	62 - 152
Vinyl acetate	125	ug/L	126	100	50 - 144
Vinyl chloride	25.0	ug/L	23.6	94	65 - 133
Xylenes, total	75.0	ug/L	71.7	96	76 - 122

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Form 3

LCS / LCS DUPLICATE RECOVERY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Solid-extr	Spike standard:	9110898
Batch:	9K27033	Laboratory ID:	9K27033-BS1
Preparation:	Methanol Prep	Initial/Final:	5.09 g / 500 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
1,1-Dichloroethene	2460	ug/kg wet	2780	113	10 - 190
Benzene	2460	ug/kg wet	2610	106	10 - 190
Chlorobenzene	2460	ug/kg wet	2500	102	10 - 190
Toluene	2460	ug/kg wet	2530	103	10 - 190
Trichloroethene	2460	ug/kg wet	2620	107	10 - 190

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

PREPARATION BATCH SUMMARY

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis G&M, Inc. - NY9A8463.4

Batch: 9K24017 Batch Matrix: Water

Preparation: 5030B MS

SAMPLE NAME	LAB SAMPLE ID	INITIAL	FINAL	DATE PREPARED	TOT/DIS
Blank	9K24017-BLK1	5.00 mL	5.00 mL	11/24/09 08:00	N/A
LCS	9K24017-BS1	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-1	RSK0991-01	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-2	RSK0991-02	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-3	RSK0991-03	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-4	RSK0991-04	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-6	RSK0991-05	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-5	RSK0991-06	5.00 mL	5.00 mL	11/24/09 08:00	N/A
TRIP BLANK	RSK0991-08	5.00 mL	5.00 mL	11/24/09 08:00	N/A

PREPARATION BATCH SUMMARY

8260B

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Batch: 9K25014 Batch Matrix: Water Preparation: 5030B MS

SAMPLE NAME	LAB SAMPLE ID	INITIAL	FINAL	DATE PREPARED	TOT/DIS
Blank	9K25014-BLK1	5.00 mL	5.00 mL	11/25/09 08:16	N/A
LCS	9K25014-BS1	5.00 mL	5.00 mL	11/25/09 08:16	N/A
GW-1	RSK0991-01RE1	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-3	RSK0991-03RE1	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-6	RSK0991-05RE1	5.00 mL	5.00 mL	11/24/09 08:00	N/A
GW-5	RSK0991-06RE1	5.00 mL	5.00 mL	11/24/09 08:00	N/A

PREPARATION BATCH SUMMARY

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis G&M, Inc. - NY9A8463.4

Batch: 9K27033 Batch Matrix: Solid-extr

Preparation: Methanol Prep

SAMPLE NAME	LAB SAMPLE ID	INITIAL	FINAL	DATE PREPARED	TOT/DIS
Blank	9K27033-BLK1	5.06 g	500 mL	11/27/09 09:00	N/A
LCS	9K27033-BS1	5.09 g	500 mL	11/27/09 09:00	N/A
GW-6 (11-12)	RSK0991-07	5.14 g	500 mL	11/27/09 09:00	N/A
GW-6 (11-12)	RSK0991-07RE1	5.14 g	500 mL	11/27/09 09:00	N/A

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Lab File ID:	G6181.D	Injection Date:	11/18/09
Instrument ID:	HP5973G	Injection Time:	12:28
Sequence:	RK91820	Lab Sample ID:	RK91820-TUN1
Calibration:	R9K1805		

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.047	PASS
75	30 - 60% of 95	50.353	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.2429	PASS
173	Less than 2% of 174	0.46965	PASS
174	50 - 100% of 95	83.57	PASS
175	5 - 9% of 174	6.7124	PASS
176	95 - 101% of 174	95.26	PASS
177	5 - 9% of 176	6.5989	PASS

INITIAL CALIBRATION STANDARDS

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK91820	Instrument:	HP5973G
Calibration:	R9K1805		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
9091452	BFB Working Standard	RK91820-TUN1	G6181.D	11/18/09 12:28
9111022	G Cal Mix - 1ppb - 11/18/09	RK91820-CAL1	G6183.D	11/18/09 13:08
9111023	G Cal Mix - 5ppb - 11/18/09	RK91820-CAL2	G6184.D	11/18/09 13:31
9111024	G Cal Mix - 10ppb - 11/18/09	RK91820-CAL3	G6185.D	11/18/09 13:53
9111025	G Cal Mix - 25ppb - 11/18/09	RK91820-CAL4	G6186.D	11/18/09 14:15
9111026	G Cal Mix - 50ppb - 11/18/09	RK91820-CAL5	G6187.D	11/18/09 14:38
9111027	G Cal Mix - 100ppb - 11/18/09	RK91820-CAL6	G6188.D	11/18/09 15:00

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Lab File ID:	G6458.D	Injection Date:	11/27/09
Instrument ID:	HP5973G	Injection Time:	09:48
Sequence:	RK92704	Lab Sample ID:	RK92704-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	21.351	PASS
75	30 - 60% of 95	51.036	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.9439	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	79.942	PASS
175	5 - 9% of 174	7.4388	PASS
176	95 - 101% of 174	95.948	PASS
177	5 - 9% of 176	6.5955	PASS

Form 5A

ANALYSIS BATCH (SEQUENCE) SUMMARY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92704	Instrument:	HP5973G
		Calibration:	R9K1805

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	RK92704-TUN1	G6458.D	11/27/09 09:48
Calibration Check	RK92704-CCV1	G6459.D	11/27/09 10:12
LCS	9K27033-BS1	G6466.D	11/27/09 13:13
Blank	9K27033-BLK1	G6467.D	11/27/09 13:35
GW-6 (11-12)	RSK0991-07	G6475.D	11/27/09 16:47

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Lab File ID:	G6502.D	Injection Date:	11/30/09
Instrument ID:	HP5973G	Injection Time:	10:00
Sequence:	RK93007	Lab Sample ID:	RK93007-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	18.685	PASS
75	30 - 60% of 95	50.846	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.2368	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	85.102	PASS
175	5 - 9% of 174	7.2839	PASS
176	95 - 101% of 174	96.424	PASS
177	5 - 9% of 176	7.0581	PASS

Form 5A

ANALYSIS BATCH (SEQUENCE) SUMMARY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK93007	Instrument:	HP5973G
		Calibration:	R9K1805

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	RK93007-TUN1	G6502.D	11/30/09 10:00
Calibration Check	RK93007-CCV1	G6503.D	11/30/09 10:30
GW-6 (11-12)	RSK0991-07RE1	G6509.D	11/30/09 13:25

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Lab File ID:	S1060.D	Injection Date:	11/23/09
Instrument ID:	HP5973S	Injection Time:	14:27
Sequence:	RK91904	Lab Sample ID:	RK91904-TUN1
Calibration:	R9K2009		

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	18.615	PASS
75	30 - 60% of 95	47.319	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.0045	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	80.409	PASS
175	5 - 9% of 174	7.0182	PASS
176	95 - 101% of 174	98.43	PASS
177	5 - 9% of 176	6.3015	PASS

INITIAL CALIBRATION STANDARDS

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK91904	Instrument:	HP5973S
Calibration:	R9K2009		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
9110192	BFB Working Standard	RK91904-TUN1	S1060.D	11/23/09 14:27
9111187	S Cal Mix - 1ppb - 11/22/09	RK91904-CAL1	S1062.D	11/23/09 15:15
9111188	S Cal Mix - 5ppb - 11/22/09	RK91904-CAL2	S1063.D	11/23/09 15:39
9111189	S Cal Mix - 10ppb - 11/22/09	RK91904-CAL3	S1064.D	11/23/09 16:04
9111190	S Cal Mix - 25ppb - 11/22/09	RK91904-CAL4	S1065.D	11/23/09 16:28
9111191	S Cal Mix - 50ppb - 11/22/09	RK91904-CAL5	S1066.D	11/23/09 16:52
9111192	S Cal Mix - 100ppb - 11/22/09	RK91904-CAL6	S1067.D	11/23/09 17:17

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Lab File ID:	S1098.D	Injection Date:	11/24/09
Instrument ID:	HP5973S	Injection Time:	09:05
Sequence:	RK92405	Lab Sample ID:	RK92405-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	17.999	PASS
75	30 - 60% of 95	46.35	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.4206	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	76.889	PASS
175	5 - 9% of 174	7.5128	PASS
176	95 - 101% of 174	96.47	PASS
177	5 - 9% of 176	7.0572	PASS

Form 5A

ANALYSIS BATCH (SEQUENCE) SUMMARY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92405	Instrument:	HP5973S
		Calibration:	R9K2009

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	RK92405-TUN1	S1098.D	11/24/09 09:05
Calibration Check	RK92405-CCV1	S1099.D	11/24/09 09:25
LCS	9K24017-BS1	S1100.D	11/24/09 10:10
Blank	9K24017-BLK1	S1103.D	11/24/09 11:24
GW-1	RSK0991-01	S1118.D	11/24/09 17:55
GW-2	RSK0991-02	S1119.D	11/24/09 18:19
GW-3	RSK0991-03	S1120.D	11/24/09 18:44
GW-4	RSK0991-04	S1121.D	11/24/09 19:08
GW-6	RSK0991-05	S1122.D	11/24/09 19:32
GW-5	RSK0991-06	S1123.D	11/24/09 19:56
TRIP BLANK	RSK0991-08	S1124.D	11/24/09 20:21

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Lab File ID:	S1127.D	Injection Date:	11/25/09
Instrument ID:	HP5973S	Injection Time:	09:06
Sequence:	RK92506	Lab Sample ID:	RK92506-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	18.502	PASS
75	30 - 60% of 95	48.376	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.648	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	76.444	PASS
175	5 - 9% of 174	7.4284	PASS
176	95 - 101% of 174	96.118	PASS
177	5 - 9% of 176	6.9314	PASS

Form 5A

ANALYSIS BATCH (SEQUENCE) SUMMARY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92506	Instrument:	HP5973S
		Calibration:	R9K2009

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	RK92506-TUN1	S1127.D	11/25/09 09:06
Calibration Check	RK92506-CCV1	S1129.D	11/25/09 09:50
LCS	9K25014-BS1	S1130.D	11/25/09 10:20
Blank	9K25014-BLK1	S1133.D	11/25/09 11:51
GW-1	RSK0991-01RE1	S1134.D	11/25/09 12:19
GW-3	RSK0991-03RE1	S1135.D	11/25/09 12:43
GW-6	RSK0991-05RE1	S1136.D	11/25/09 13:07
GW-5	RSK0991-06RE1	S1137.D	11/25/09 13:32

Form 8

INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory: TestAmerica Buffalo
SDG:
Client: ARCADIS U.S., Inc. - Albany, NY
Project: Arcadis G&M, Inc. - NY9A8463.4
Sequence: RK92405
Instrument: HP5973S
Matrix: Water
Calibration: R9K2009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (RK92405-CCV1)			Lab File ID: S1099.D			Analyzed: 11/24/09 09:25			
1,4-Dichlorobenzene-d4	221647	9.05				50 - 200		+/-0.50	
1,4-Difluorobenzene	401345	4.99				50 - 200		+/-0.50	
Chlorobenzene-d5	222022	7.19				50 - 200		+/-0.50	
LCS (9K24017-BS1)			Lab File ID: S1100.D			Analyzed: 11/24/09 10:10			
1,4-Dichlorobenzene-d4	232676	9.05	221647	9.05	105	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	414824	4.99	401345	4.99	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	228295	7.19	222022	7.19	103	50 - 200	0.0000	+/-0.50	
Blank (9K24017-BLK1)			Lab File ID: S1103.D			Analyzed: 11/24/09 11:24			
1,4-Dichlorobenzene-d4	196320	9.05	221647	9.05	89	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	389490	4.99	401345	4.99	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	208848	7.19	222022	7.19	94	50 - 200	0.0000	+/-0.50	
GW-1 (RSK0991-01)			Lab File ID: S1118.D			Analyzed: 11/24/09 17:55			
1,4-Dichlorobenzene-d4	200882	9.06	221647	9.05	91	50 - 200	0.0100	+/-0.50	
1,4-Difluorobenzene	392864	4.99	401345	4.99	98	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	212121	7.19	222022	7.19	96	50 - 200	0.0000	+/-0.50	
GW-2 (RSK0991-02)			Lab File ID: S1119.D			Analyzed: 11/24/09 18:19			
1,4-Dichlorobenzene-d4	208007	9.05	221647	9.05	94	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	390407	4.99	401345	4.99	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	212713	7.19	222022	7.19	96	50 - 200	0.0000	+/-0.50	
GW-3 (RSK0991-03)			Lab File ID: S1120.D			Analyzed: 11/24/09 18:44			
1,4-Dichlorobenzene-d4	195603	9.05	221647	9.05	88	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	380713	4.99	401345	4.99	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	205627	7.19	222022	7.19	93	50 - 200	0.0000	+/-0.50	
GW-4 (RSK0991-04)			Lab File ID: S1121.D			Analyzed: 11/24/09 19:08			
1,4-Dichlorobenzene-d4	195089	9.05	221647	9.05	88	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	380485	4.99	401345	4.99	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	205142	7.19	222022	7.19	92	50 - 200	0.0000	+/-0.50	
GW-6 (RSK0991-05)			Lab File ID: S1122.D			Analyzed: 11/24/09 19:32			
1,4-Dichlorobenzene-d4	205433	9.05	221647	9.05	93	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	389949	4.99	401345	4.99	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	215292	7.19	222022	7.19	97	50 - 200	0.0000	+/-0.50	
GW-5 (RSK0991-06)			Lab File ID: S1123.D			Analyzed: 11/24/09 19:56			
1,4-Dichlorobenzene-d4	195524	9.05	221647	9.05	88	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	381232	4.99	401345	4.99	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	207122	7.19	222022	7.19	93	50 - 200	0.0000	+/-0.50	

Form 8

INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK92405	Instrument:	HP5973S
Matrix:	Water	Calibration:	R9K2009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TRIP BLANK (RSK0991-08)			Lab File ID: S1124.D			Analyzed: 11/24/09 20:21			
1,4-Dichlorobenzene-d4	186517	9.05	221647	9.05	84	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	374568	4.99	401345	4.99	93	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	200881	7.19	222022	7.19	90	50 - 200	0.0000	+/-0.50	

Form 8

INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory: TestAmerica Buffalo
SDG:
Client: ARCADIS U.S., Inc. - Albany, NY
Project: Arcadis G&M, Inc. - NY9A8463.4
Sequence: RK92506
Instrument: HP5973S
Matrix: Water
Calibration: R9K2009

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (RK92506-CCV1)			Lab File ID: S1129.D			Analyzed: 11/25/09 09:50			
1,4-Dichlorobenzene-d4	219341	9.06				50 - 200		+/-0.50	
1,4-Difluorobenzene	394951	4.99				50 - 200		+/-0.50	
Chlorobenzene-d5	219500	7.19				50 - 200		+/-0.50	
LCS (9K25014-BS1)			Lab File ID: S1130.D			Analyzed: 11/25/09 10:20			
1,4-Dichlorobenzene-d4	223032	9.05	219341	9.06	102	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	398966	4.99	394951	4.99	101	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	219970	7.19	219500	7.19	100	50 - 200	0.0000	+/-0.50	
Blank (9K25014-BLK1)			Lab File ID: S1133.D			Analyzed: 11/25/09 11:51			
1,4-Dichlorobenzene-d4	192842	9.05	219341	9.06	88	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	381900	4.99	394951	4.99	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	206667	7.19	219500	7.19	94	50 - 200	0.0000	+/-0.50	
GW-1 (RSK0991-01RE1)			Lab File ID: S1134.D			Analyzed: 11/25/09 12:19			
1,4-Dichlorobenzene-d4	197194	9.05	219341	9.06	90	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	379448	4.99	394951	4.99	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	204960	7.19	219500	7.19	93	50 - 200	0.0000	+/-0.50	
GW-3 (RSK0991-03RE1)			Lab File ID: S1135.D			Analyzed: 11/25/09 12:43			
1,4-Dichlorobenzene-d4	190987	9.06	219341	9.06	87	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	382168	4.99	394951	4.99	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	207495	7.19	219500	7.19	95	50 - 200	0.0000	+/-0.50	
GW-6 (RSK0991-05RE1)			Lab File ID: S1136.D			Analyzed: 11/25/09 13:07			
1,4-Dichlorobenzene-d4	186894	9.06	219341	9.06	85	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	375928	4.99	394951	4.99	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	205386	7.19	219500	7.19	94	50 - 200	0.0000	+/-0.50	
GW-5 (RSK0991-06RE1)			Lab File ID: S1137.D			Analyzed: 11/25/09 13:32			
1,4-Dichlorobenzene-d4	176892	9.06	219341	9.06	81	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	357464	4.99	394951	4.99	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	191591	7.19	219500	7.19	87	50 - 200	0.0000	+/-0.50	

Form 8

INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory: TestAmerica Buffalo
SDG:
Client: ARCADIS U.S., Inc. - Albany, NY
Project: Arcadis G&M, Inc. - NY9A8463.4
Sequence: RK92704
Instrument: HP5973G
Matrix: Solid-extr
Calibration: R9K1805

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (RK92704-CCV1)			Lab File ID: G6459.D			Analyzed: 11/27/09 10:12			
1,4-Dichlorobenzene-d4	182026	10.73				50 - 200		+/-0.50	
1,4-Difluorobenzene	345489	5.45				50 - 200		+/-0.50	
Chlorobenzene-d5	173310	8.32				50 - 200		+/-0.50	
LCS (9K27033-BS1)			Lab File ID: G6466.D			Analyzed: 11/27/09 13:13			
1,4-Dichlorobenzene-d4	151334	10.73	182026	10.73	83	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	315614	5.45	345489	5.45	91	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	157837	8.33	173310	8.32	91	50 - 200	0.0100	+/-0.50	
Blank (9K27033-BLK1)			Lab File ID: G6467.D			Analyzed: 11/27/09 13:35			
1,4-Dichlorobenzene-d4	151788	10.73	182026	10.73	83	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	308995	5.45	345489	5.45	89	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	154985	8.32	173310	8.32	89	50 - 200	0.0000	+/-0.50	
GW-6 (11-12) (RSK0991-07)			Lab File ID: G6475.D			Analyzed: 11/27/09 16:47			
1,4-Dichlorobenzene-d4	146117	10.73	182026	10.73	80	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	318257	5.45	345489	5.45	92	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	160283	8.32	173310	8.32	92	50 - 200	0.0000	+/-0.50	

Form 8

INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Sequence:	RK93007	Instrument:	HP5973G
Matrix:	Solid-extr	Calibration:	R9K1805

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (RK93007-CCV1)			Lab File ID: G6503.D			Analyzed: 11/30/09 10:30			
1,4-Dichlorobenzene-d4	161666	10.73				50 - 200		+/-0.50	
1,4-Difluorobenzene	314266	5.45				50 - 200		+/-0.50	
Chlorobenzene-d5	161517	8.32				50 - 200		+/-0.50	
GW-6 (11-12) (RSK0991-07RE1)			Lab File ID: G6509.D			Analyzed: 11/30/09 13:25			
1,4-Dichlorobenzene-d4	149402	10.73	161666	10.73	92	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	313368	5.45	314266	5.45	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	160034	8.33	161517	8.32	99	50 - 200	0.0100	+/-0.50	

METHOD DETECTION AND REPORTING LIMITS

8260B

Laboratory: TestAmerica Buffalo **SDG:**

Client: ARCADIS U.S., Inc. - Albany, NY **Project:** Arcadis G&M, Inc. - NY9A8463.4

Matrix: Solid-extr **Instrument:** HP5973G

Analyte	MDL	MRL	Units
1,1,1-Trichloroethane	7.3	100	ug/kg
1,1,2,2-Tetrachloroethane	16	100	ug/kg
1,1,2-Trichloroethane	5.0	100	ug/kg
1,1,2-Trichlorotrifluoroethane	50	100	ug/kg
1,1-Dichloroethane	5.0	100	ug/kg
1,1-Dichloroethene	12	100	ug/kg
1,2,4-Trichlorobenzene	6.1	100	ug/kg
1,2-Dibromo-3-chloropropane	50	100	ug/kg
1,2-Dibromoethane (EDB)	3.8	100	ug/kg
1,2-Dichlorobenzene	7.8	100	ug/kg
1,2-Dichloroethane	5.0	100	ug/kg
1,2-Dichloropropane	50	100	ug/kg
1,3-Dichlorobenzene	5.2	100	ug/kg
1,4-Dichlorobenzene	14	100	ug/kg
2-Butanone (MEK)	36	500	ug/kg
2-Hexanone	34	500	ug/kg
4-Methyl-2-pentanone (MIBK)	32	500	ug/kg
Acetone	22	500	ug/kg
Benzene	4.8	100	ug/kg
Bromodichloromethane	5.2	100	ug/kg
Bromoform	50	100	ug/kg
Bromomethane	22	100	ug/kg
Carbon disulfide	8.6	100	ug/kg
Carbon Tetrachloride	9.6	100	ug/kg
Chlorobenzene	13	100	ug/kg
Chlorodibromomethane	5.6	100	ug/kg
Chloroethane	42	100	ug/kg
Chloroform	6.2	100	ug/kg
Chloromethane	6.0	100	ug/kg
cis-1,2-Dichloroethene	5.0	100	ug/kg
cis-1,3-Dichloropropene	5.6	100	ug/kg
Cyclohexane	4.6	100	ug/kg
Dichlorodifluoromethane	8.2	100	ug/kg
Ethylbenzene	6.8	100	ug/kg
Isopropylbenzene	15	100	ug/kg
Methyl Acetate	5.4	100	ug/kg
Methyl tert-Butyl Ether	9.8	100	ug/kg
Methylcyclohexane	6.5	100	ug/kg

METHOD DETECTION AND REPORTING LIMITS

8260B

Laboratory: TestAmerica Buffalo **SDG:**

Client: ARCADIS U.S., Inc. - Albany, NY **Project:** Arcadis G&M, Inc. - NY9A8463.4

Matrix: Solid-extr **Instrument:** HP5973G

Analyte	MDL	MRL	Units
Methylene Chloride	20	100	ug/kg
Styrene	5.0	100	ug/kg
Tetrachloroethene	13	100	ug/kg
Toluene	7.6	100	ug/kg
trans-1,2-Dichloroethene	10	100	ug/kg
trans-1,3-Dichloropropene	4.8	100	ug/kg
Trichloroethene	6.8	100	ug/kg
Trichlorofluoromethane	9.4	100	ug/kg
Vinyl chloride	12	200	ug/kg
Xylenes, total	17	200	ug/kg

METHOD DETECTION AND REPORTING LIMITS

8260B

Laboratory: TestAmerica Buffalo **SDG:**

Client: ARCADIS U.S., Inc. - Albany, NY **Project:** Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water **Instrument:** HP5973S

Analyte	MDL	MRL	Units
1,1,1-Trichloroethane	0.26	1.0	ug/L
1,1,2,2-Tetrachloroethane	0.21	1.0	ug/L
1,1,2-Trichloroethane	0.23	1.0	ug/L
1,1,2-Trichlorotrifluoroethane	0.31	1.0	ug/L
1,1-Dichloroethane	0.38	1.0	ug/L
1,1-Dichloroethene	0.29	1.0	ug/L
1,2,4-Trichlorobenzene	0.41	1.0	ug/L
1,2-Dibromo-3-chloropropane	0.39	1.0	ug/L
1,2-Dibromoethane (EDB)	0.17	1.0	ug/L
1,2-Dichlorobenzene	0.20	1.0	ug/L
1,2-Dichloroethane	0.21	1.0	ug/L
1,2-Dichloroethene, Total	0.70	2.0	ug/L
1,2-Dichloropropane	0.32	1.0	ug/L
1,3-Dichlorobenzene	0.36	1.0	ug/L
1,4-Dichlorobenzene	0.39	1.0	ug/L
2-Butanone (MEK)	1.3	5.0	ug/L
2-Hexanone	1.2	5.0	ug/L
4-Methyl-2-pentanone (MIBK)	0.91	5.0	ug/L
Acetone	1.3	5.0	ug/L
Benzene	0.41	1.0	ug/L
Bromodichloromethane	0.39	1.0	ug/L
Bromoform	0.26	1.0	ug/L
Bromomethane	0.28	1.0	ug/L
Carbon disulfide	0.19	1.0	ug/L
Carbon Tetrachloride	0.27	1.0	ug/L
Chlorobenzene	0.32	1.0	ug/L
Chlorodibromomethane	0.32	1.0	ug/L
Chloroethane	0.32	1.0	ug/L
Chloroform	0.34	1.0	ug/L
Chloromethane	0.35	1.0	ug/L
cis-1,2-Dichloroethene	0.38	1.0	ug/L
cis-1,3-Dichloropropene	0.36	1.0	ug/L
Cyclohexane	0.53	1.0	ug/L
Dichlorodifluoromethane	0.29	1.0	ug/L
Ethylbenzene	0.18	1.0	ug/L
Isopropylbenzene	0.19	1.0	ug/L
Methyl Acetate	0.50	1.0	ug/L
Methyl tert-Butyl Ether	0.16	1.0	ug/L

METHOD DETECTION AND REPORTING LIMITS

8260B

Laboratory: TestAmerica Buffalo **SDG:**

Client: ARCADIS U.S., Inc. - Albany, NY **Project:** Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water **Instrument:** HP5973S

Analyte	MDL	MRL	Units
Methylcyclohexane	0.50	1.0	ug/L
Methylene Chloride	0.44	1.0	ug/L
Styrene	0.18	1.0	ug/L
Tetrachloroethene	0.36	1.0	ug/L
Toluene	0.51	1.0	ug/L
trans-1,2-Dichloroethene	0.42	1.0	ug/L
trans-1,3-Dichloropropene	0.37	1.0	ug/L
Trichloroethene	0.46	1.0	ug/L
Trichlorofluoromethane	0.15	1.0	ug/L
Vinyl acetate	0.85	5.0	ug/L
Vinyl chloride	0.24	1.0	ug/L
Xylenes, total	0.66	2.0	ug/L

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-1

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-01 File ID: S1118.D

Sampled: 11/16/09 13:45 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 17:55

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	4.0	
75-35-4	1,1-Dichloroethene	1	0.60	J
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	340	E
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	18	
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	340	E
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-1

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-01 File ID: S1118.D

Sampled: 11/16/09 13:45 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 17:55

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	4.8	
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	3.2	
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	94	
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.8	99	66 - 137	
4-Bromofluorobenzene	25.0	24.4	98	73 - 120	
Toluene-d8	25.0	23.8	95	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	200882	9.06	221647	9.05	
1,4-Difluorobenzene	392864	4.99	401345	4.99	
Chlorobenzene-d5	212121	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1118.D Vial: 21
Acq On : 24 Nov 2009 17:55 Operator: DHC
Sample : RSK0991-01 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:28 2009 Results File: R9K2009-SIXPT.RES

REI @ 5X

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	392864	25.00	ug/L	0.00 97.89%
43) CI20	Chlorobenzene-D5	7.19	82	212121	25.00	ug/L	0.00 95.54%
63) CI30	1,4-Dichlorobenzene-	9.06	152	200882	25.00	ug/L	0.00 90.63%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	103123	24.27	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	97.08%		
31) CS15	1,2-Dichloroethane-D	4.69	65	138431	24.82	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	99.28%		
44) CS05	Toluene-D8	6.07	98	446059	23.77	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	95.08%		
62) CS10	p-Bromofluorobenzene	8.12	174	138728	24.42	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	97.68%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	1.26	85	479	N.D.		
3) C010	Chloromethane	0.00	50	0	N.D.		
4) C020	Vinyl chloride	1.53	62	574316	93.52	ug/L	88
5) C015	Bromomethane	0.00	94	0	N.D.		
6) C025	Chloroethane	1.90	64	307	N.D.		
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	2.59	96	2499	0.60	ug/L	99
9) C030	Methylene chloride	0.00	84	0	N.D.		
10) C040	Carbon disulfide	2.77	76	2294	N.D.		
11) C036	Acrolein	0.00	56	0	N.D.		
12) C038	Acrylonitrile	0.00	53	0	N.D.		
13) C035	Acetone	2.72	43	24131	17.82	ug/L	96
14) C300	Acetonitrile	0.00	41	0	N.D.		
15) C276	Iodomethane	0.00	142	0	N.D.		
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	3.26	73	2030	N.D.		
18) C057	trans-1,2-Dichloroet	3.25	96	22692	4.83	ug/L	95
19) C255	Methyl Acetate	2.99	43	161	N.D.		
20) C050	1,1-Dichloroethane	3.60	63	34657	3.99	ug/L	99
21) C125	Vinyl Acetate	0.00	43	0	N.D.		
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.		
23) C056	cis-1,2-Dichloroethe	4.06	96	1740688	335.72	ug/L	96
24) C272	Tetrahydrofuran	0.00	42	0	N.D.		
25) C222	Bromochloromethane	0.00	128	0	N.D.		
27) C060	Chloroform	0.00	83	0	N.D.		
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.		
29) C120	Carbon tetrachlori	0.00	117	0	N.D.		
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.		
32) C165	Benzene	4.70	78	1125	N.D.		
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.		
34) C110	2-Butanone	4.12	43	4090	N.D.		
35) C256	Cyclohexane	0.00	56	0	N.D.		
36) C150	Trichloroethene	5.17	95	15685	3.16	ug/L	90
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1118.D Vial: 21
Acq On : 24 Nov 2009 17:55 Operator: DHC
Sample : RSK0991-01 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:28 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	4459	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.03	43	879	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	6.65	43	503	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.36	91	4226	N.D.	
58) C246	m,p-Xylene	7.36	106	1884	N.D.	
59) C247	o-Xylene	7.68	106	1051	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.30	91	285	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	8.43	105	1177	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	8.75	105	2657	N.D.	
75) C308	sec-Butylbenzene	8.75	105	2657	N.D.	
76) C260	1,3-Dichlorobenzen	9.07	146	141	N.D.	
77) C309	4-Isopropyltoluene	9.10	119	742	N.D.	
78) C267	1,4-Dichlorobenzen	9.07	146	141	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	10.91	128	820	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

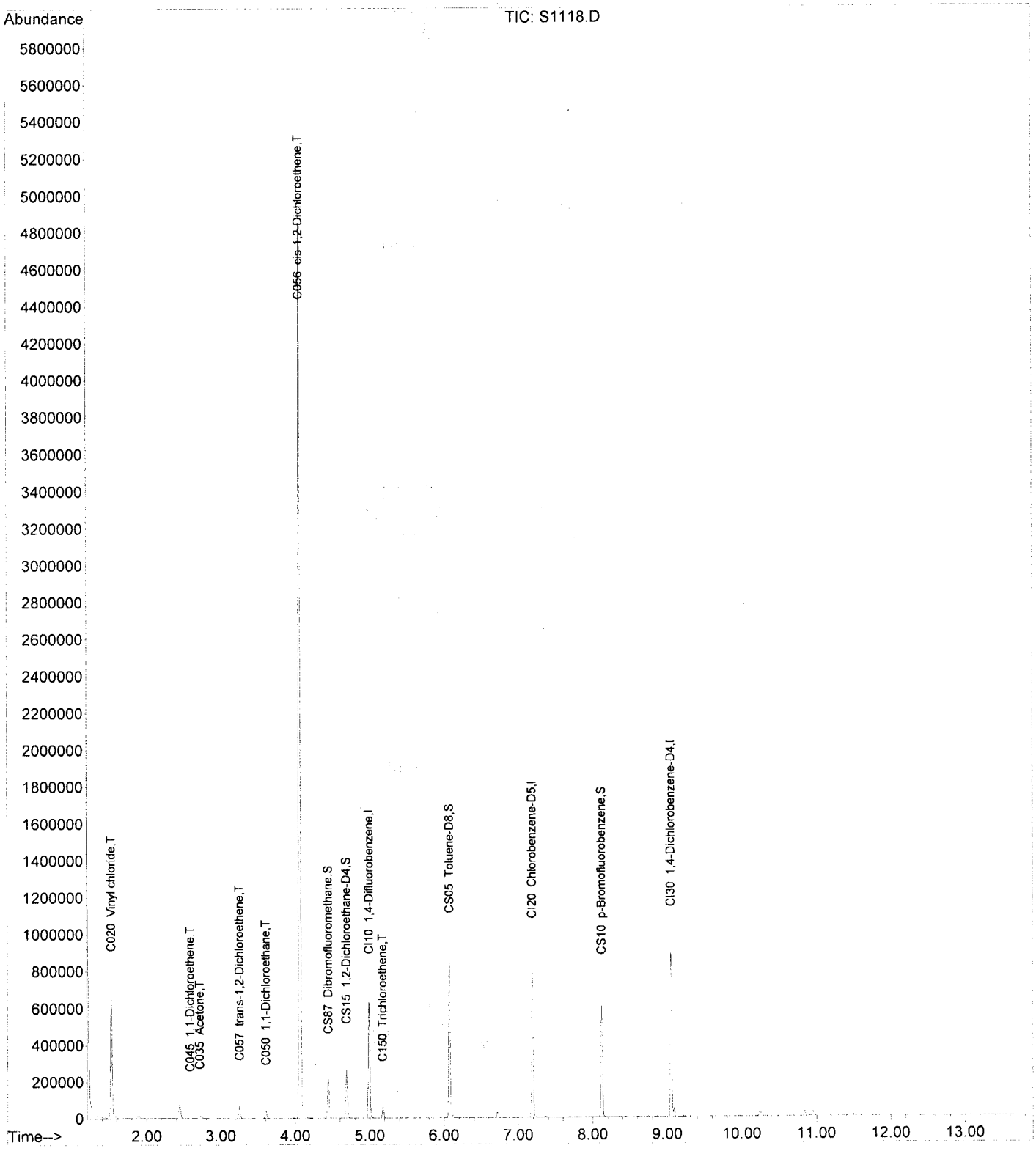
(#) = qualifier out of range (m) = manual integration (+) = signals summed

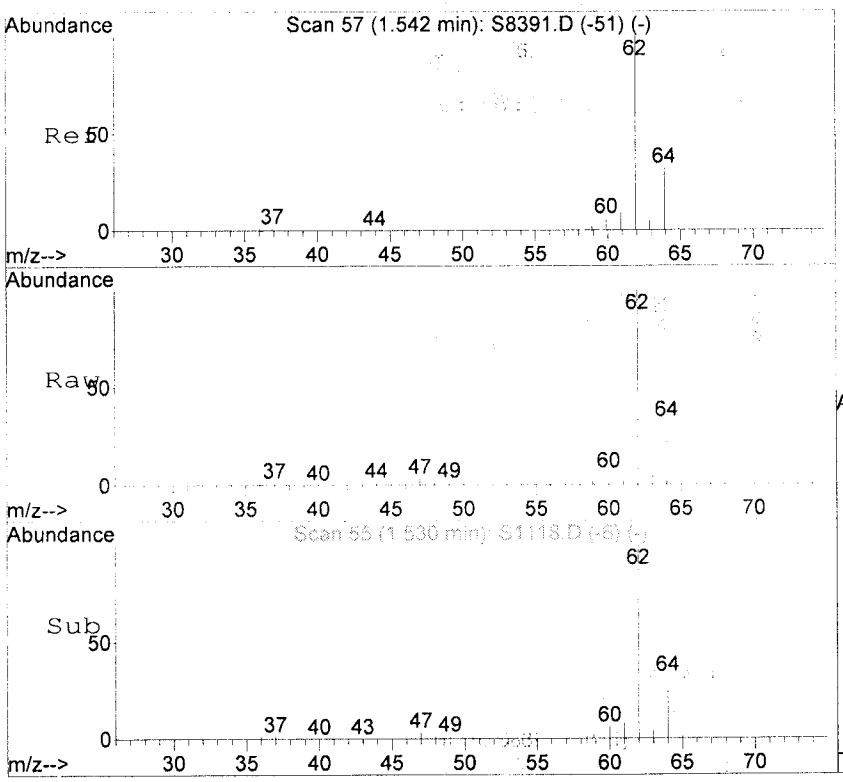
1/21/2010

Data File : D:\MSDCHEM\S\DATA\112409\S1118.D
Acq On : 24 Nov 2009 17:55
Sample : RSK0991-01
Misc :
MS Integration Params: RTEINT.P

Vial: 21
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 09:33:28 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA

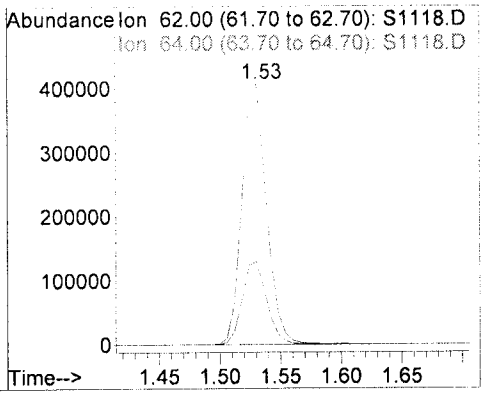


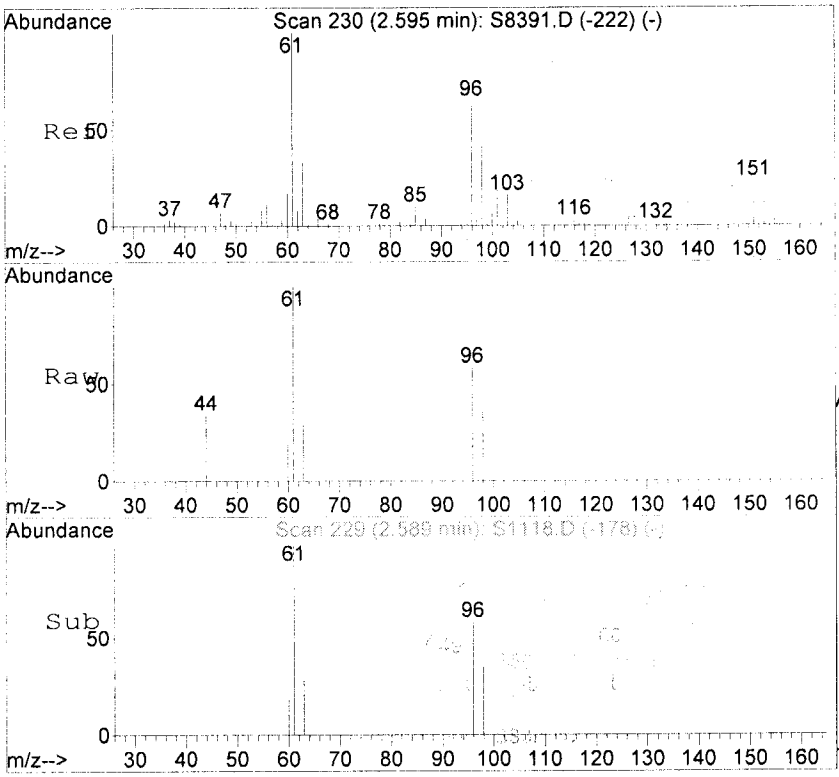


#4
C020 Vinyl chloride
Concen: 93.52 ug/L
RT: 1.53 min Scan# 55
Delta R.T. -0.00 min
Lab File: S1118.D
Acq: 24 Nov 2009 17:55

Tgt Ion: 62 Resp: 574316

Ion	Ratio	Lower	Upper
62	100		
64	31.8	9.4	69.4

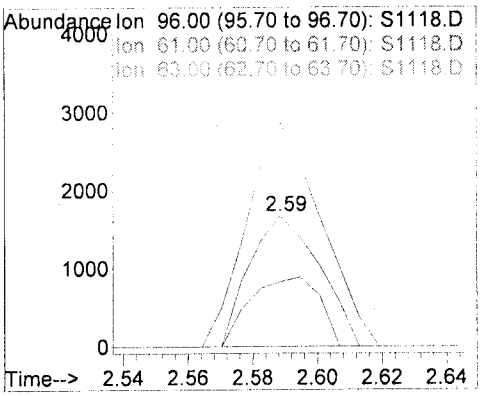


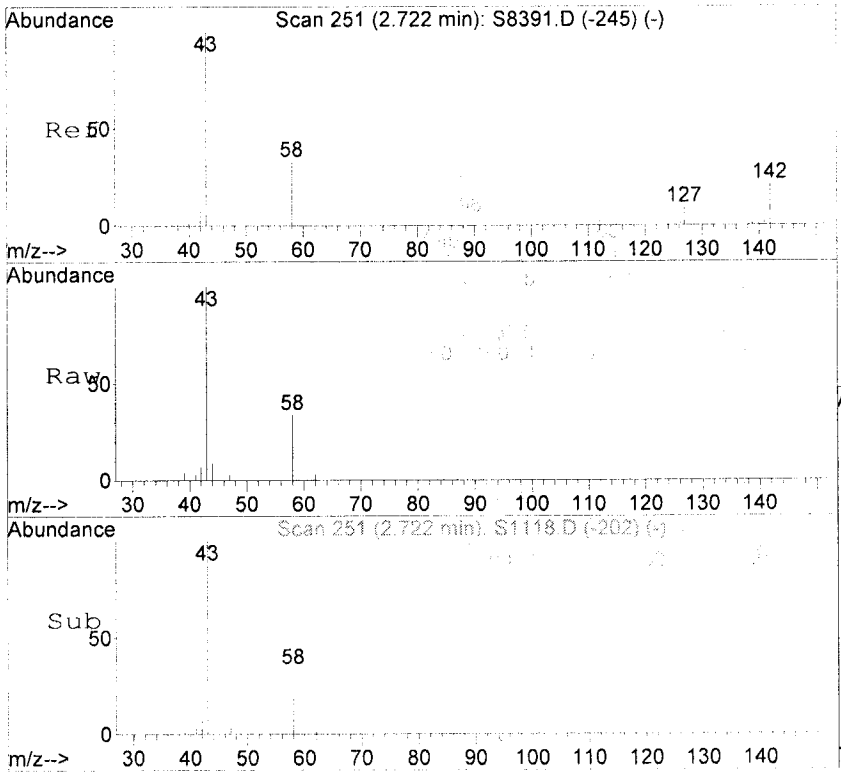


#8
C045 1,1-Dichloroethene
Concen: 0.60 ug/L
RT: 2.59 min Scan# 229
Delta R.T. 0.01 min
Lab File: S1118.D
Acq: 24 Nov 2009 17:55

Tgt Ion: 96 Resp: 2499

Ion	Ratio	Lower	Upper
96	100		
61	171.8	140.6	200.6
63	49.6	21.9	81.9

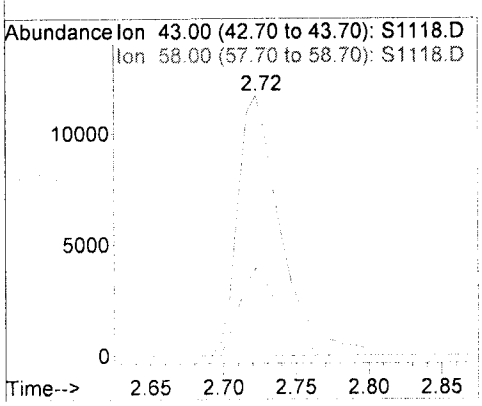


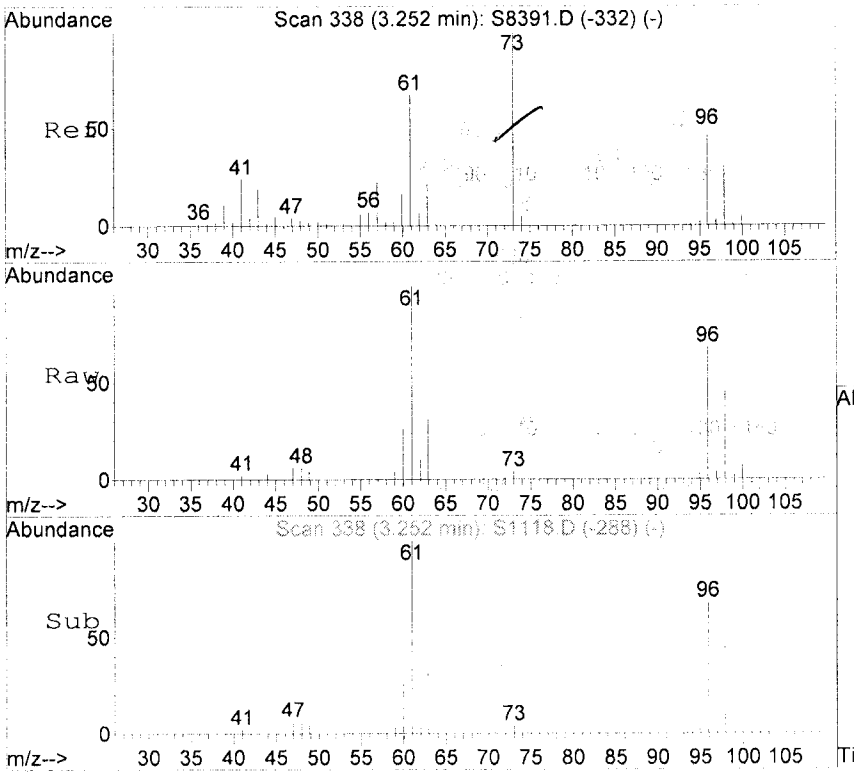


#13
C035 Acetone
Concen: 17.82 ug/L
RT: 2.72 min Scan# 251
Delta R.T. -0.00 min
Lab File: S1118.D
Acq: 24 Nov 2009 17:55

Tgt Ion: 43 Resp: 24131

Ion	Ratio	Lower	Upper
43	100		
58	33.8	1.4	61.4

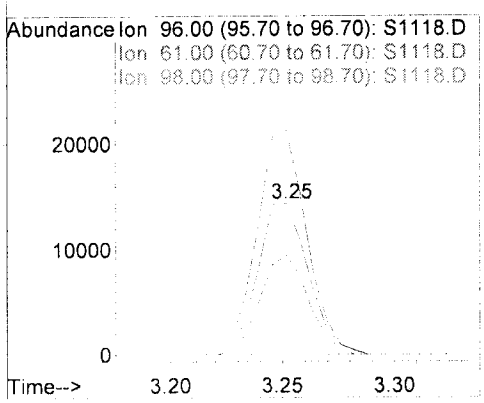


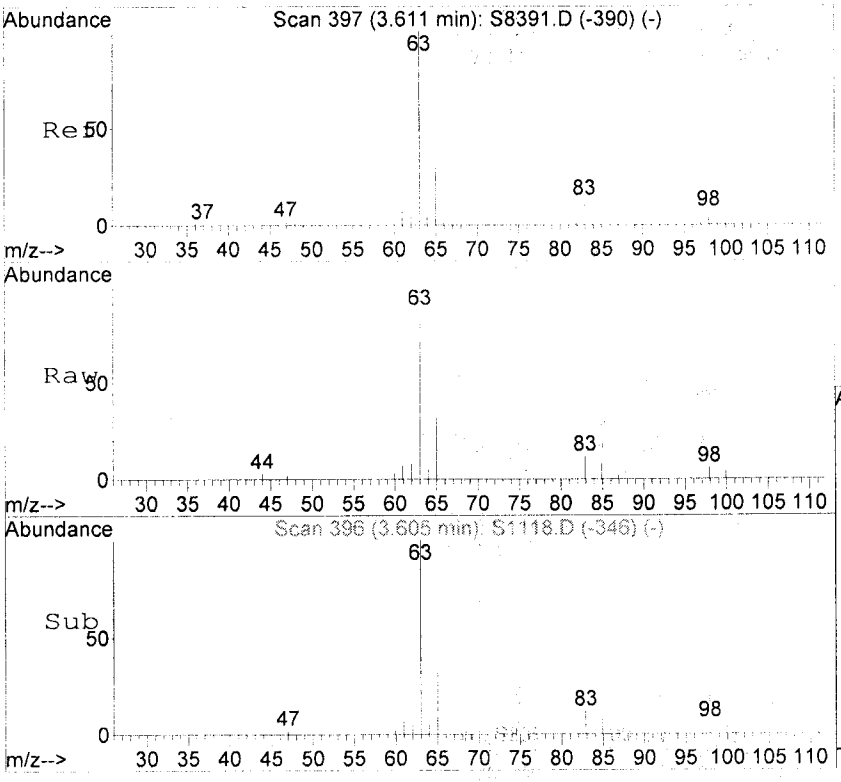


#18
C057 trans-1,2-Dichloroethene
Concen: 4.83 ug/L
RT: 3.25 min Scan# 338
Delta R.T. 0.01 min
Lab File: S1118.D
Acq: 24 Nov 2009 17:55

Tgt Ion: 96 Resp: 22692

Ion	Ratio	Lower	Upper
96	100		
61	147.8	111.5	171.5
98	66.0	33.0	93.0

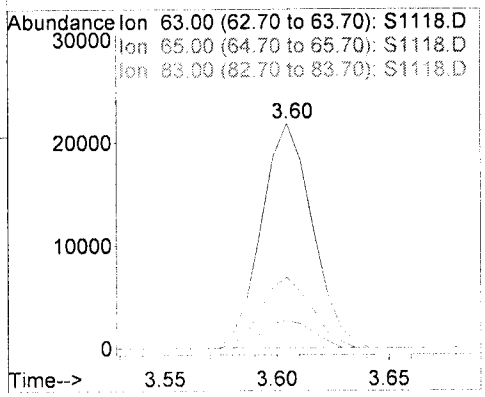


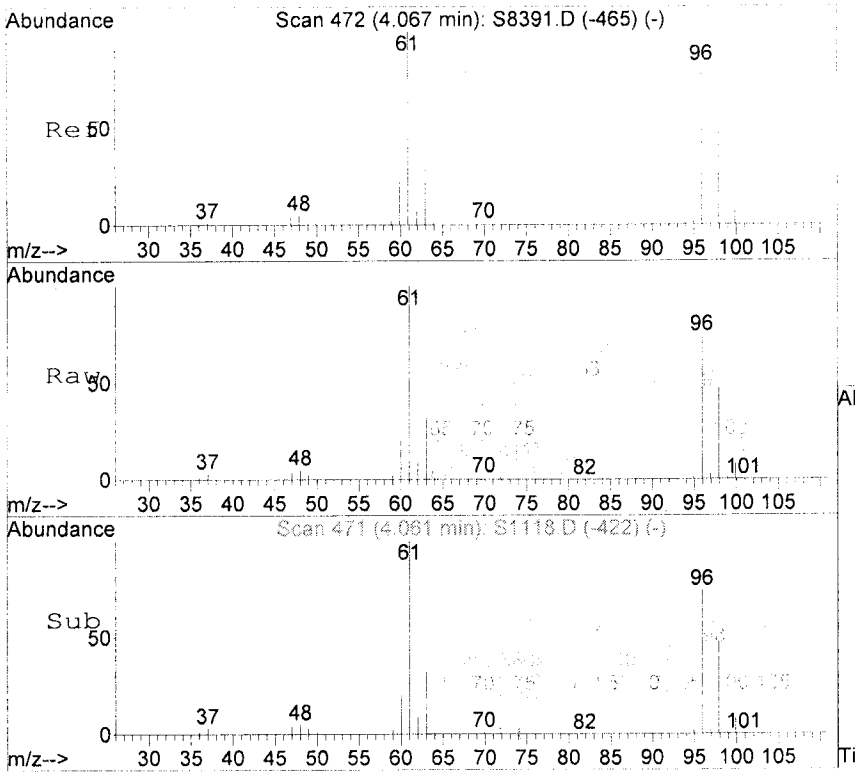


#20
C050 1,1-Dichloroethane
Concen: 3.99 ug/L
RT: 3.60 min Scan# 396
Delta R.T. 0.01 min
Lab File: S1118.D
Acq: 24 Nov 2009 17:55

Tgt Ion: 63 Resp: 34657

Ion	Ratio	Lower	Upper
63	100		
65	31.6	1.5	61.5
83	12.4	0.0	43.0

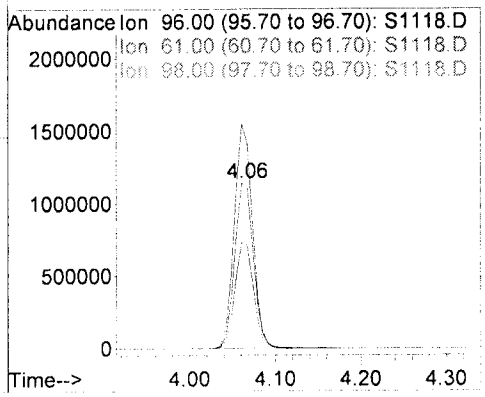


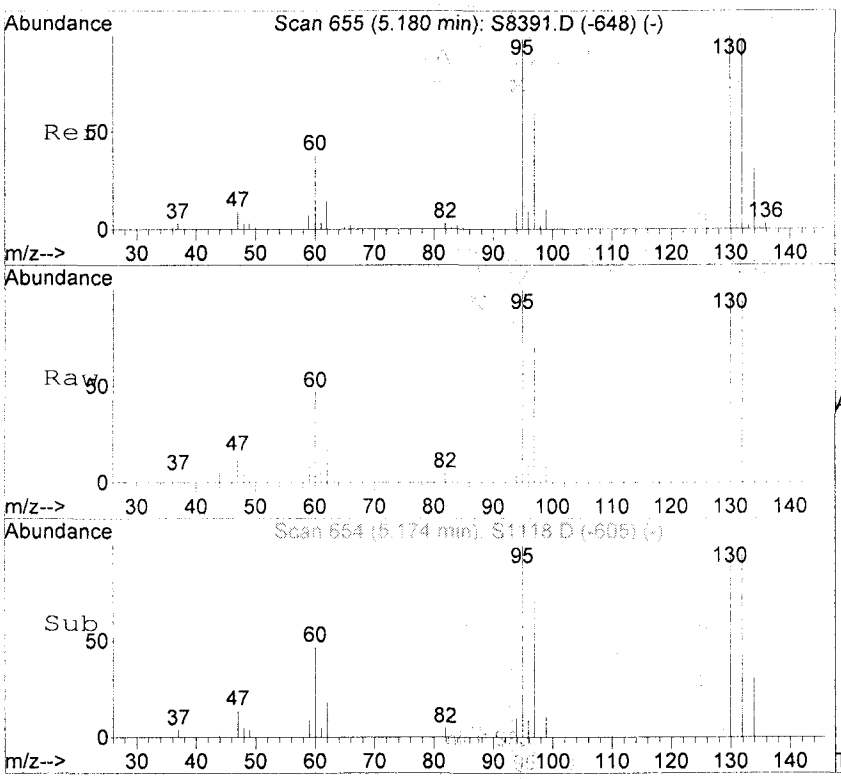


#23
C056 cis-1,2-Dichloroethene
Concen: 335.72 ug/L
RT: 4.06 min Scan# 471
Delta R.T. -0.00 min
Lab File: S1118.D
Acq: 24 Nov 2009 17:55

Tgt Ion: 96 Resp: 1740688

Ion	Ratio	Lower	Upper
96	100		
61	135.8	99.9	159.9
98	64.2	31.8	91.8

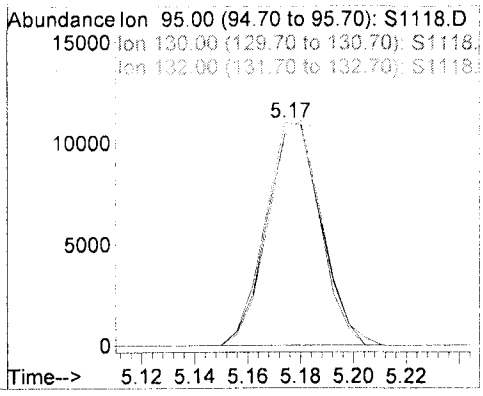




#36
C150 Trichloroethene
Concen: 3.16 ug/L
RT: 5.17 min Scan# 654
Delta R.T. -0.00 min
Lab File: S1118.D
Acq: 24 Nov 2009 17:55

Tgt Ion: 95 Resp: 15685

Ion	Ratio	Lower	Upper
95	100		
130	95.0	77.6	137.6
132	94.2	72.8	132.8



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-1

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-01RE1 File ID: S1134.D

Sampled: 11/16/09 13:45 Prepared: 11/24/09 08:00 Analyzed: 11/25/09 12:19

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	5	5.0	UD
79-34-5	1,1,2,2-Tetrachloroethane	5	5.0	UD
79-00-5	1,1,2-Trichloroethane	5	5.0	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	5	5.0	UD
75-34-3	1,1-Dichloroethane	5	3.9	JD
75-35-4	1,1-Dichloroethene	5	5.0	UD
120-82-1	1,2,4-Trichlorobenzene	5	5.0	UD
96-12-8	1,2-Dibromo-3-chloropropane	5	5.0	UD
106-93-4	1,2-Dibromoethane (EDB)	5	5.0	UD
95-50-1	1,2-Dichlorobenzene	5	5.0	UD
107-06-2	1,2-Dichloroethane	5	5.0	UD
540-59-0	1,2-Dichloroethene, Total	5	320	D
78-87-5	1,2-Dichloropropane	5	5.0	UD
541-73-1	1,3-Dichlorobenzene	5	5.0	UD
106-46-7	1,4-Dichlorobenzene	5	5.0	UD
78-93-3	2-Butanone (MEK)	5	25	UD
591-78-6	2-Hexanone	5	25	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	5	25	UD
67-64-1	Acetone	5	15	JD
71-43-2	Benzene	5	5.0	UD
75-27-4	Bromodichloromethane	5	5.0	UD
75-25-2	Bromoform	5	5.0	UD
74-83-9	Bromomethane	5	5.0	UD
75-15-0	Carbon disulfide	5	5.0	UD
56-23-5	Carbon Tetrachloride	5	5.0	UD
108-90-7	Chlorobenzene	5	5.0	UD
124-48-1	Chlorodibromomethane	5	5.0	UD
75-00-3	Chloroethane	5	5.0	UD
67-66-3	Chloroform	5	5.0	UD
74-87-3	Chloromethane	5	5.0	UD
156-59-2	cis-1,2-Dichloroethene	5	320	D
10061-01-5	cis-1,3-Dichloropropene	5	5.0	UD
110-82-7	Cyclohexane	5	5.0	UD
75-71-8	Dichlorodifluoromethane	5	5.0	UD
100-41-4	Ethylbenzene	5	5.0	UD
98-82-8	Isopropylbenzene	5	5.0	UD
79-20-9	Methyl Acetate	5	5.0	UD
1634-04-4	Methyl tert-Butyl Ether	5	5.0	UD
108-87-2	Methylcyclohexane	5	5.0	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-1

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	RSK0991-01RE1	File ID:	S1134.D
Sampled:	11/16/09 13:45	Prepared:	11/24/09 08:00	Analyzed:	11/25/09 12:19
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	5	5.0	UD
100-42-5	Styrene	5	5.0	UD
127-18-4	Tetrachloroethene	5	5.0	UD
108-88-3	Toluene	5	5.0	UD
156-60-5	trans-1,2-Dichloroethene	5	4.2	JD
10061-02-6	trans-1,3-Dichloropropene	5	5.0	UD
79-01-6	Trichloroethene	5	2.6	JD
75-69-4	Trichlorofluoromethane	5	5.0	UD
108-05-4	Vinyl acetate	5	25	UD
75-01-4	Vinyl chloride	5	91	D
1330-20-7	Xylenes, total	5	10	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.0	96	66 - 137	D
4-Bromofluorobenzene	25.0	24.6	98	73 - 120	D
Toluene-d8	25.0	23.8	95	71 - 126	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	197194	9.05	219341	9.06	
1,4-Difluorobenzene	379448	4.99	394951	4.99	
Chlorobenzene-d5	204960	7.19	219500	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1134.D Vial: 8
Acq On : 25 Nov 2009 12:19 Operator: DHC
Sample : RSK0991-01RE1@5X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:34 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	379448	25.00 ug/L	0.00 96.07%
43) CI20	Chlorobenzene-D5	7.19	82	204960	25.00 ug/L	0.00 93.38%
63) CI30	1,4-Dichlorobenzene-	9.05	152	197194	25.00 ug/L	0.00 89.90%
System Monitoring Compounds						
26) CS87	Dibromofluoromethane	4.44	111	100469	24.48 ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	97.92%	
31) CS15	1,2-Dichloroethane-D	4.69	65	129529	24.05 ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	96.20%	
44) CS05	Toluene-D8	6.07	98	431727	23.81 ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	95.24%	
62) CS10	p-Bromofluorobenzene	8.12	174	134744	24.55 ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	98.20%	
Target Compounds						Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.	
3) C010	Chloromethane	0.00	50	0	N.D.	
4) C020	Vinyl chloride	1.53	62	108277	18.25 ug/L	87
5) C015	Bromomethane	0.00	94	0	N.D.	
6) C025	Chloroethane	0.00	64	0	N.D.	
7) C275	Trichlorofluoromet	0.00	101	0	N.D.	
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030	Methylene chloride	3.05	84	288	N.D.	
10) C040	Carbon disulfide	2.77	76	828	N.D.	
11) C036	Acrolein	0.00	56	0	N.D.	
12) C038	Acrylonitrile	0.00	53	0	N.D.	
13) C035	Acetone	2.73	43	3891	2.97 ug/L	91
14) C300	Acetonitrile	0.00	41	0	N.D.	
15) C276	Iodomethane	0.00	142	0	N.D.	
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.	
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.	
18) C057	trans-1,2-Dichloroet	3.25	96	3864	0.85 ug/L	91
19) C255	Methyl Acetate	0.00	43	0	N.D.	
20) C050	1,1-Dichloroethane	3.60	63	6501	0.78 ug/L	93
21) C125	Vinyl Acetate	0.00	43	0	N.D.	
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056	cis-1,2-Dichloroethe	4.06	96	318343	63.57 ug/L	96
24) C272	Tetrahydrofuran	0.00	42	0	N.D.	
25) C222	Bromochloromethane	0.00	128	0	N.D.	
27) C060	Chloroform	0.00	83	0	N.D.	
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120	Carbon tetrachlori	0.00	117	0	N.D.	
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165	Benzene	4.69	78	266	N.D.	
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110	2-Butanone	4.13	43	142	N.D.	
35) C256	Cyclohexane	0.00	56	0	N.D.	
36) C150	Trichloroethene	5.17	95	2468	0.52 ug/L	96
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278	Dibromomethane	0.00	93	0	N.D.	

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1134.D Vial: 8
Acq On : 25 Nov 2009 12:19 Operator: DHC
Sample : RSK0991-01RE1@5X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:34 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

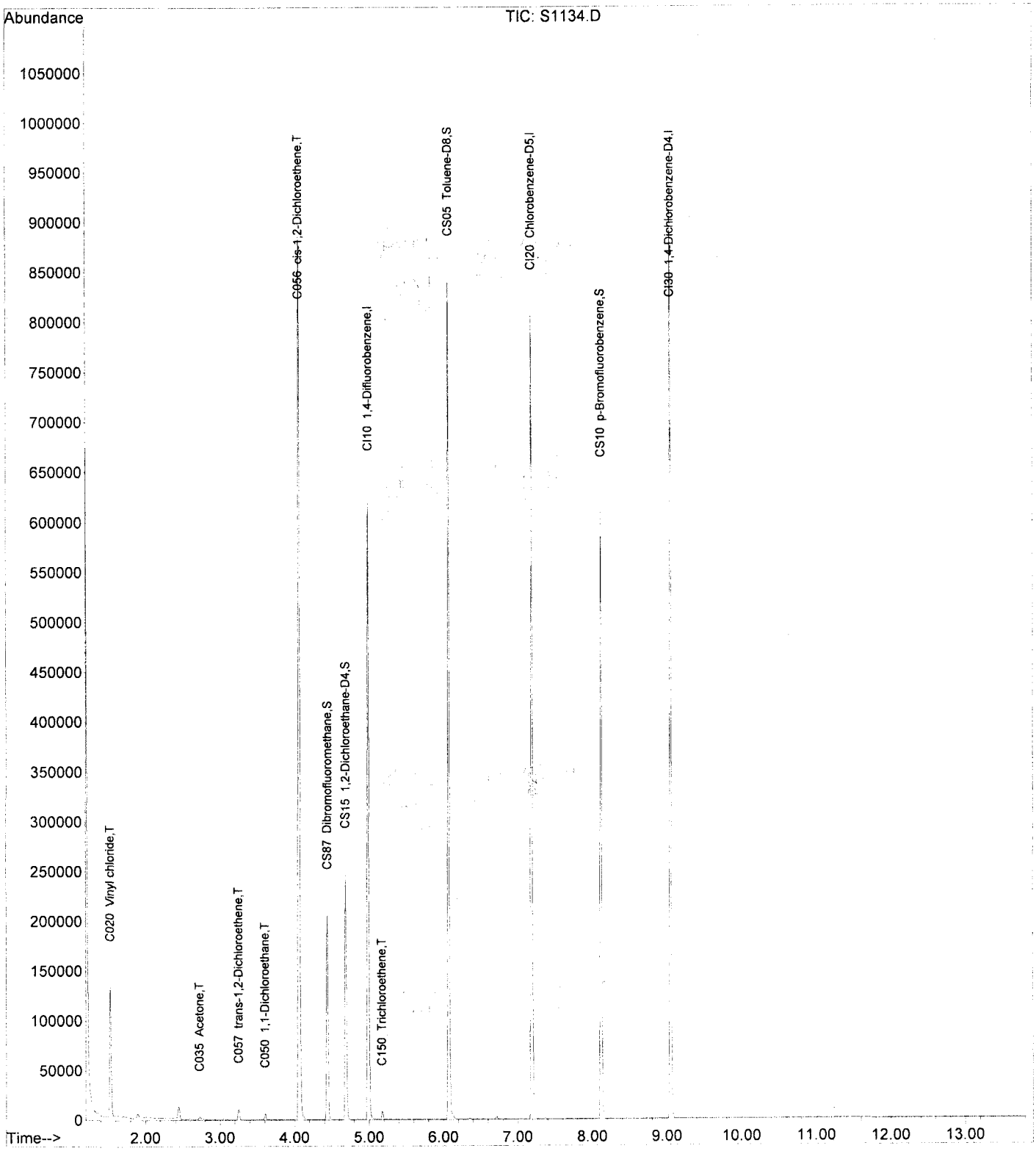
Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	1214	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1770	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	6.72	43	334	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.27	91	269	N.D.	
58) C246	m,p-Xylene	7.36	106	160	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.30	91	154	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	8.74	105	636	N.D.	
75) C308	sec-Butylbenzene	8.74	105	636	N.D.	
76) C260	1,3-Dichlorobenzen	8.99	146	161	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	9.07	146	572	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	10.91	128	332	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

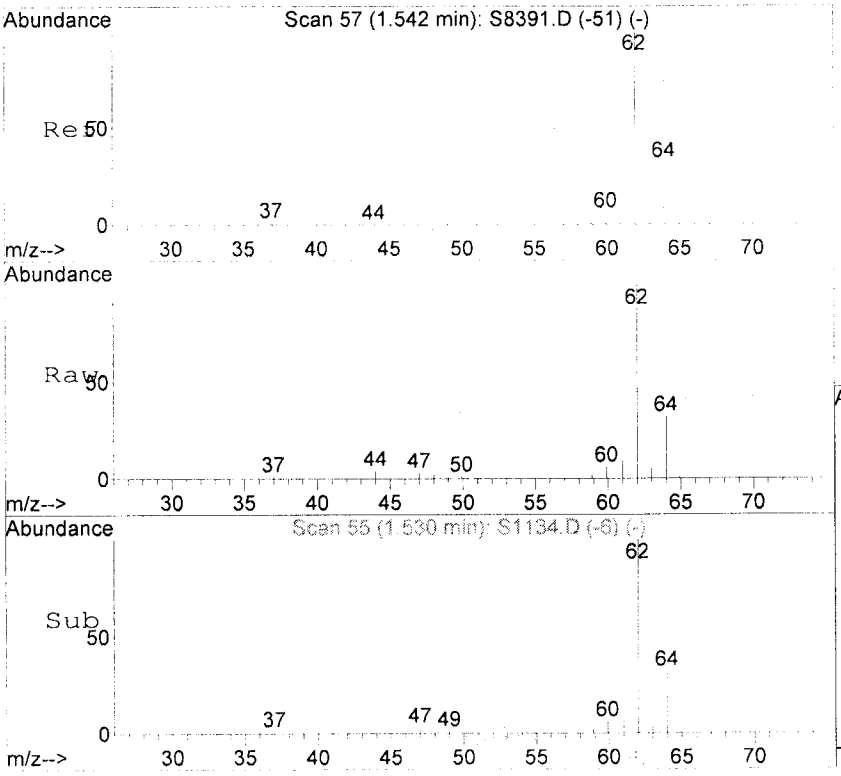
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : D:\MSDCHEM\S\DATA\112509\S1134.D
Acq On : 25 Nov 2009 12:19
Sample : RSK0991-01RE1@5X
Misc :
MS Integration Params: RTEINT.P

Vial: 8
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 15:10:34 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA

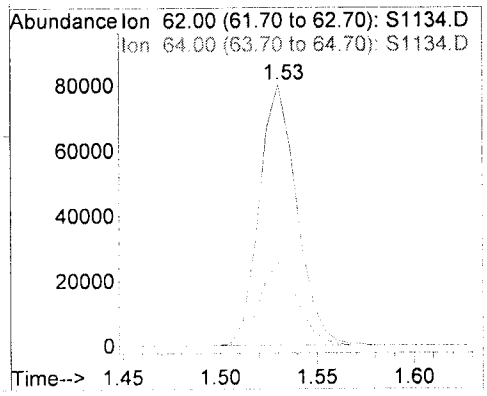


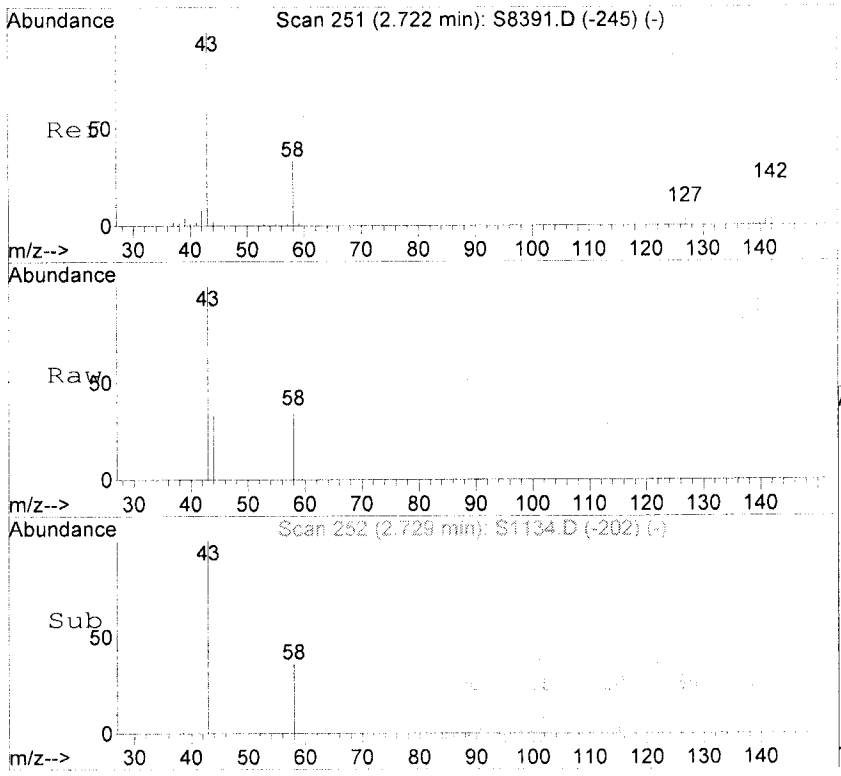


#4
C020 Vinyl chloride
Concen: 18.25 ug/L
RT: 1.53 min Scan# 55
Delta R.T. 0.00 min
Lab File: S1134.D
Acq: 25 Nov 2009 12:19

Tgt Ion: 62 Resp: 108277

Ion	Ratio	Lower	Upper
62	100		
64	31.7	9.4	69.4

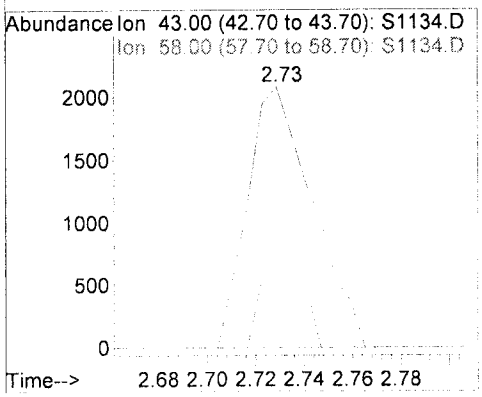


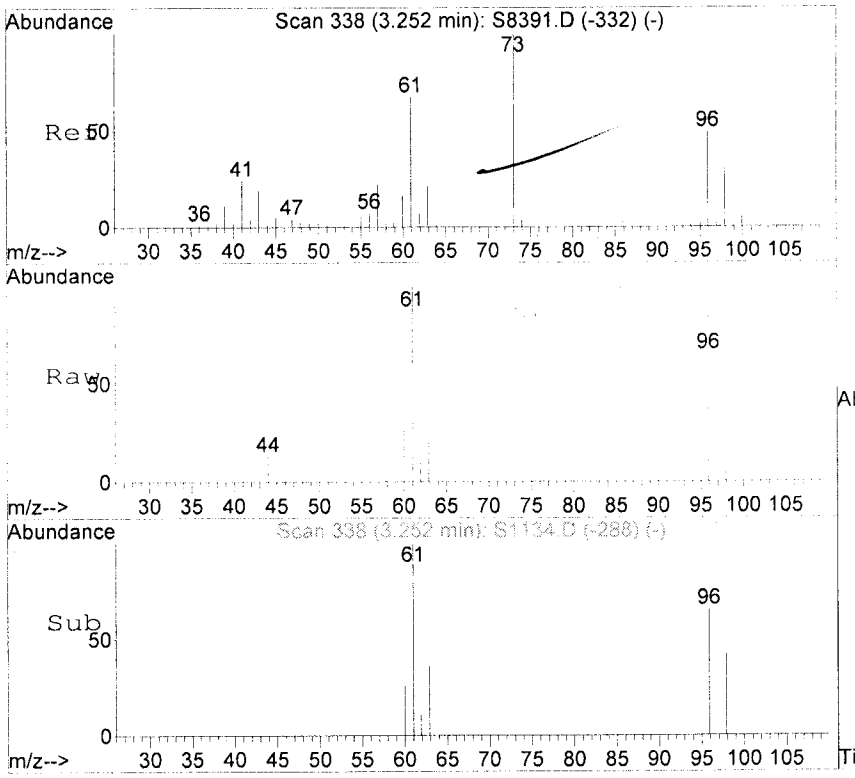


#13
C035 Acetone
Concen: 2.97 ug/L
RT: 2.73 min Scan# 252
Delta R.T. 0.01 min
Lab File: S1134.D
Acq: 25 Nov 2009 12:19

Tgt Ion: 43 Resp: 3891

Ion	Ratio	Lower	Upper
43	100		
58	36.3	1.4	61.4

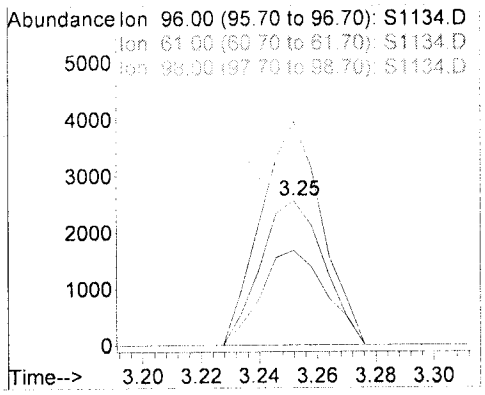


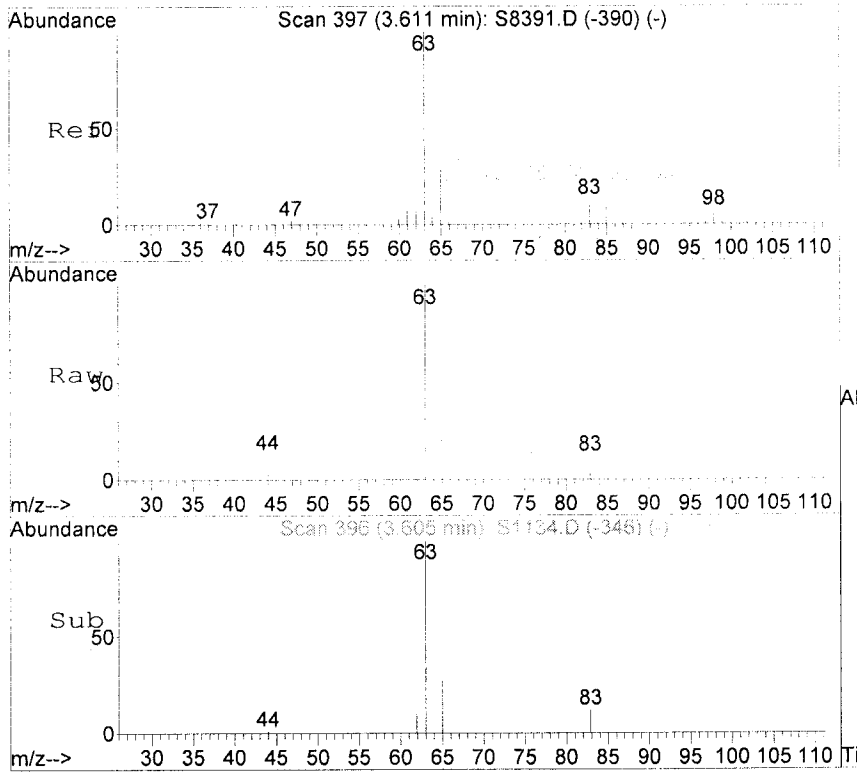


#18
C057 trans-1,2-Dichloroethene
Concen: 0.85 ug/L
RT: 3.25 min Scan# 338
Delta R.T. 0.01 min
Lab File: S1134.D
Acq: 25 Nov 2009 12:19

Tgt Ion: 96 Resp: 3864

Ion	Ratio	Lower	Upper
96	100		
61	155.0	111.5	171.5
98	65.6	33.0	93.0

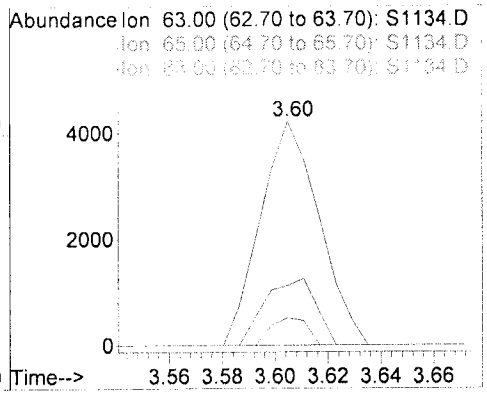


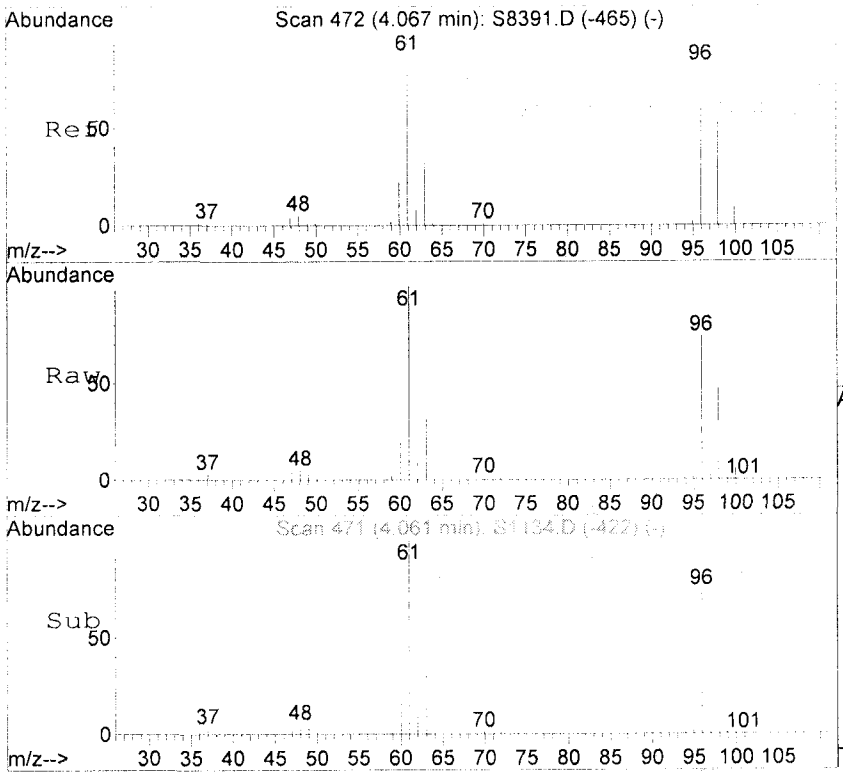


#20
C050 1,1-Dichloroethane
Concen: 0.78 ug/L
RT: 3.60 min Scan# 396
Delta R.T. 0.01 min
Lab File: S1134.D
Acq: 25 Nov 2009 12:19

Tgt Ion: 63 Resp: 6501

Ion	Ratio	Lower	Upper
63	100		
65	26.5	1.5	61.5
83	12.1	0.0	43.0

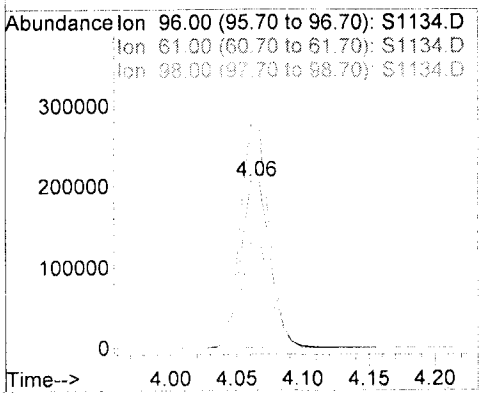


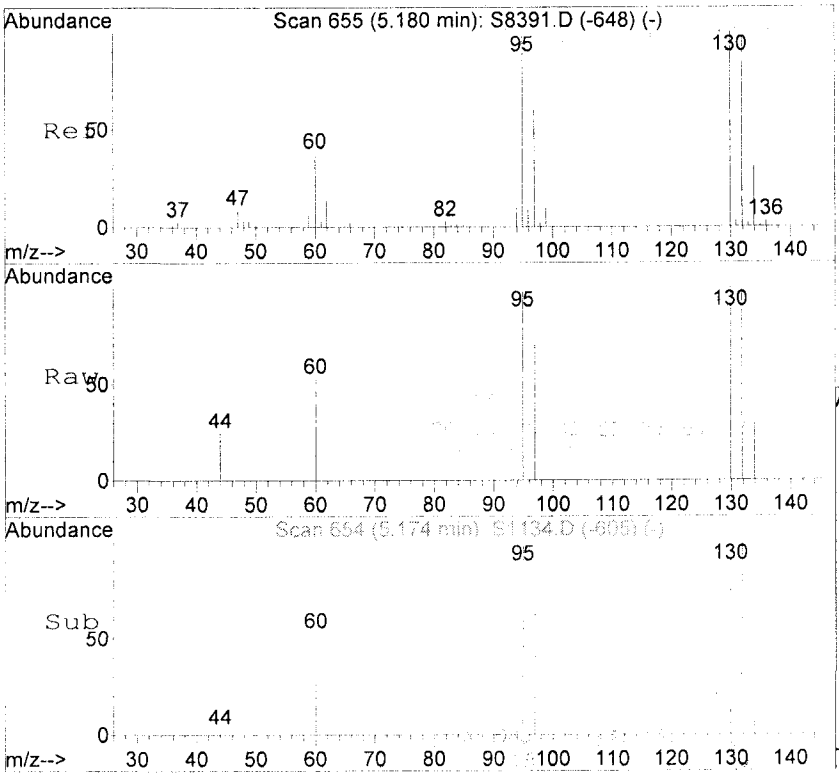


#23
C056 cis-1,2-Dichloroethene
Concen: 63.57 ug/L
RT: 4.06 min Scan# 471
Delta R.T. 0.00 min
Lab File: S1134.D
Acq: 25 Nov 2009 12:19

Tgt Ion: 96 Resp: 318343

Ion	Ratio	Lower	Upper
96	100		
61	135.0	99.9	159.9
98	63.1	31.8	91.8

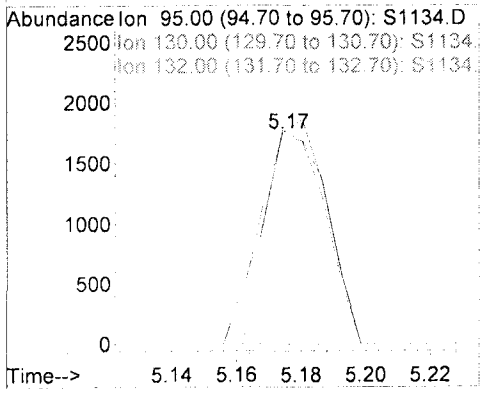




#36
C150 Trichloroethene
Concen: 0.52 ug/L
RT: 5.17 min Scan# 654
Delta R.T. 0.00 min
Lab File: S1134.D
Acq: 25 Nov 2009 12:19

Tgt Ion: 95 Resp: 2468

Ion	Ratio	Lower	Upper
95	100		
130	101.7	77.6	137.6
132	100.5	72.8	132.8



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-2

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-02 File ID: S1119.D

Sampled: 11/17/09 08:40 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 18:19

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	14	
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	76	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	26	
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	2.8	
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	74	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

GW-2

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-02 File ID: S1119.D

Sampled: 11/17/09 08:40 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 18:19

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	2.1	
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.1	
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	17	
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.6	98	66 - 137	
4-Bromofluorobenzene	25.0	24.0	96	73 - 120	
Toluene-d8	25.0	23.5	94	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	208007	9.05	221647	9.05	
1,4-Difluorobenzene	390407	4.99	401345	4.99	
Chlorobenzene-d5	212713	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1119.D
Acq On : 24 Nov 2009 18:19
Sample : RSK0991-02
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:33 2009

Vial: 22
Operator: DHC
Inst : HP5973S
Multiplr: 1.00
Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

11/25/09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	4.99	114	390407	25.00 ug/L	0.00 97.27%
43) CI20 Chlorobenzene-D5	7.19	82	212713	25.00 ug/L	0.00 95.81%
63) CI30 1,4-Dichlorobenzene-	9.05	152	208007	25.00 ug/L	0.00 93.85%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.44	111	102178	24.20 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 96.80%		
31) CS15 1,2-Dichloroethane-D	4.69	65	136227	24.58 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery = 98.32%		
44) CS05 Toluene-D8	6.07	98	441450	23.46 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery = 93.84%		
62) CS10 p-Bromofluorobenzene	8.12	174	136685	23.99 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery = 95.96%		
Target Compounds					Qvalue
2) C290 Dichlorodifluorome	0.00	85	0	N.D.	
3) C010 Chloromethane	0.00	50	0	N.D.	
4) C020 Vinyl chloride	1.53	62	102875	16.86 ug/L	87
5) C015 Bromomethane	0.00	94	0	N.D.	
6) C025 Chloroethane	1.90	64	708	0.83 ug/L #	37
7) C275 Trichlorofluoromet	0.00	101	0	N.D.	
8) C045 1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030 Methylene chloride	0.00	84	0	N.D.	
10) C040 Carbon disulfide	2.77	76	4938	0.51 ug/L	74
11) C036 Acrolein	0.00	56	0	N.D.	
12) C038 Acrylonitrile	0.00	53	0	N.D.	
13) C035 Acetone	2.72	43	34640	25.74 ug/L	99
14) C300 Acetonitrile	0.00	41	0	N.D.	
15) C276 Iodomethane	0.00	142	0	N.D.	
16) C291 1,1,2-Trichloro-1,	0.00	101	0	N.D.	
17) C962 T-butyl Methyl Eth	0.00	73	0	N.D.	
18) C057 trans-1,2-Dichloroet	3.25	96	9951	2.13 ug/L	93
19) C255 Methyl Acetate	2.98	43	1155	N.D.	
20) C050 1,1-Dichloroethane	3.60	63	2298	N.D.	
21) C125 Vinyl Acetate	0.00	43	0	N.D.	
22) C051 2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056 cis-1,2-Dichloroethe	4.06	96	381837	74.11 ug/L	96
24) C272 Tetrahydrofuran	0.00	42	0	N.D.	
25) C222 Bromochloromethane	0.00	128	0	N.D.	
27) C060 Chloroform	0.00	83	0	N.D.	
28) C115 1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120 Carbon tetrachlori	0.00	117	0	N.D.	
30) C116 1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165 Benzene	4.70	78	1717	N.D.	
33) C065 1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110 2-Butanone	4.12	43	4139	N.D.	
35) C256 Cyclohexane	0.00	56	0	N.D.	
36) C150 Trichloroethene	5.17	95	5253	1.07 ug/L	88
37) C140 1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278 Dibromomethane	0.00	93	0	N.D.	

11/25/09

Data File : D:\MSDCHEM\S\DATA\112409\S1119.D
Acq On : 24 Nov 2009 18:19
Sample : RSK0991-02
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:33 2009

Vial: 22
Operator: DHC
Inst : HP5973S
Multiplr: 1.00
Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.		
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.		
41) C012	Methylcyclohexane	5.28	83	130	N.D.		
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.		
45) C230	Toluene	6.12	92	1752	N.D.		
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.		
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.		
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.		
49) C210	4-Methyl-2-pentano	6.07	43	1916	N.D.		
50) C220	Tetrachloroethene	0.00	166	0	N.D.		
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.		
52) C155	Dibromochlorometha	0.00	129	0	N.D.		
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.		
54) C215	2-Hexanone	6.71	43	129	N.D.		
55) C235	Chlorobenzene	7.21	112	37936	2.78	ug/L	96
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.		
57) C240	Ethylbenzene	7.36	91	876	N.D.		
58) C246	m,p-Xylene	7.36	106	131	N.D.		
59) C247	o-Xylene	0.00	106	0	N.D.		
60) C245	Styrene	0.00	104	0	N.D.		
61) C180	Bromoform	0.00	173	0	N.D.		
64) C966	Isopropylbenzene	0.00	105	0	N.D.		
65) C301	Bromobenzene	0.00	156	0	N.D.		
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.		
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.		
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.		
69) C302	n-Propylbenzene	8.12	91	281	N.D.		
70) C303	2-Chlorotoluene	0.00	126	0	N.D.		
71) C289	4-Chlorotoluene	0.00	126	0	N.D.		
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.		
73) C306	tert-Butylbenzene	0.00	134	0	N.D.		
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.		
75) C308	sec-Butylbenzene	0.00	105	0	N.D.		
76) C260	1,3-Dichlorobenzen	9.07	146	1211	N.D.		
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.		
78) C267	1,4-Dichlorobenzen	9.07	146	1211	N.D.		
79) C249	1,2-Dichlorobenzene	9.38	146	139409	14.05	ug/L	97
80) C310	n-Butylbenzene	0.00	91	0	N.D.		
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.		
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.		
83) C316	Hexachlorobutadien	0.00	225	0	N.D.		
84) C314	Naphthalene	0.00	128	0	N.D.		
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.		

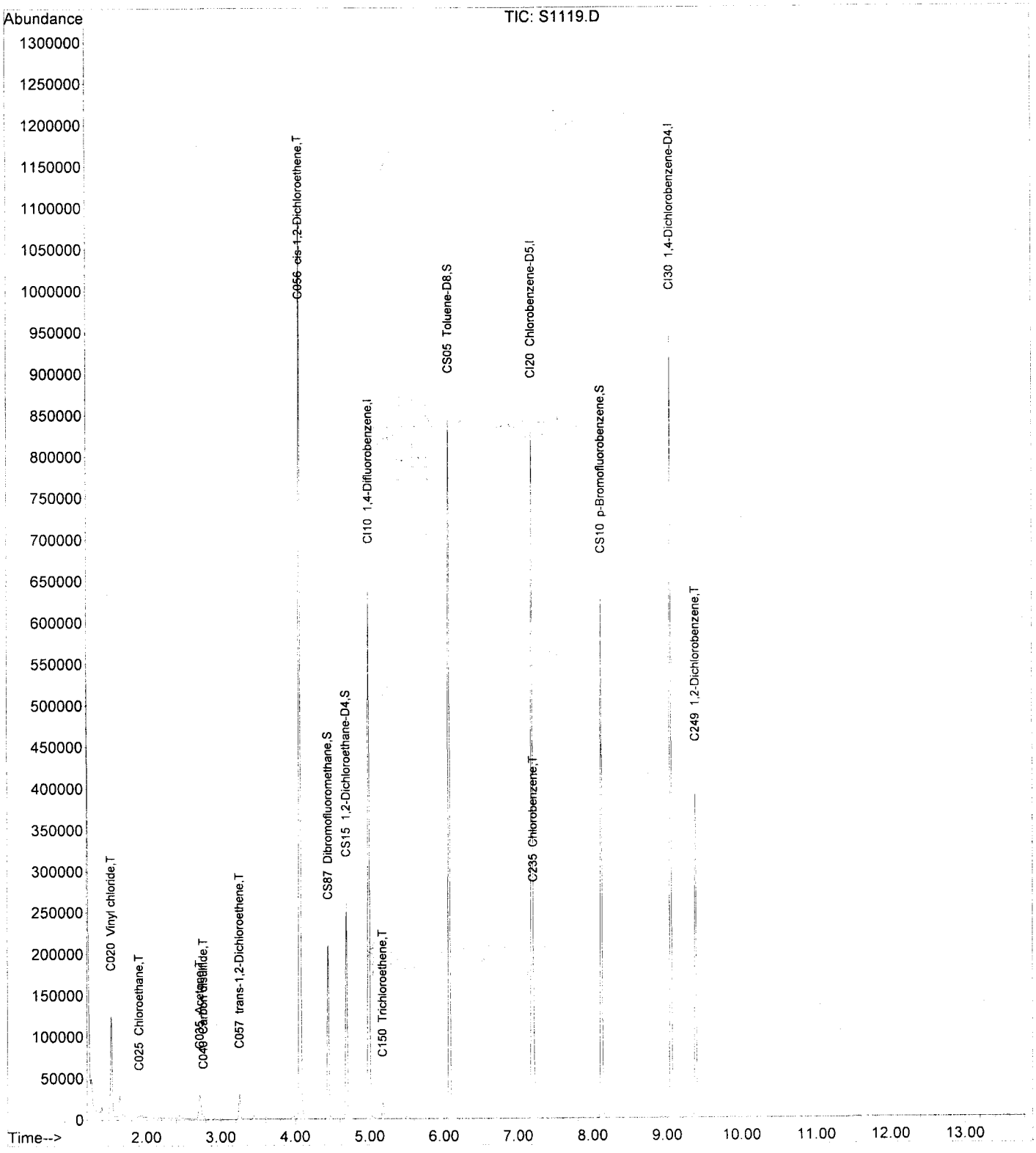
(#) = qualifier out of range (m) = manual integration (+) = signals summed

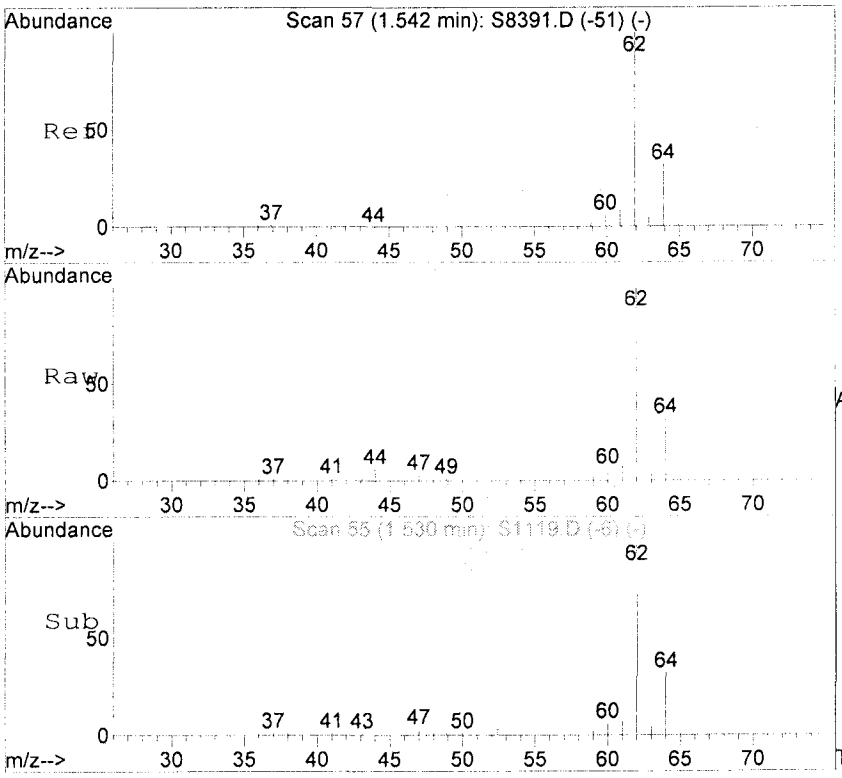
1/12/2010

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1119.D Vial: 22
Acq On : 24 Nov 2009 18:19 Operator: DHC
Sample : RSK0991-02 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 25 09:33:33 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA

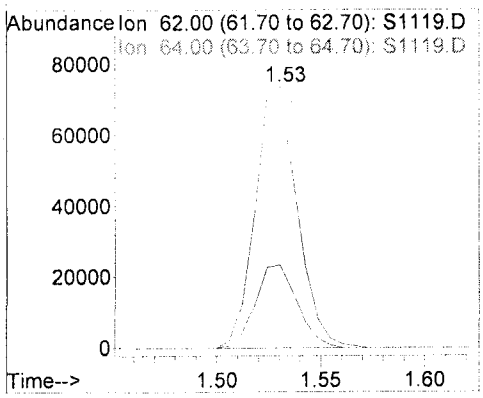


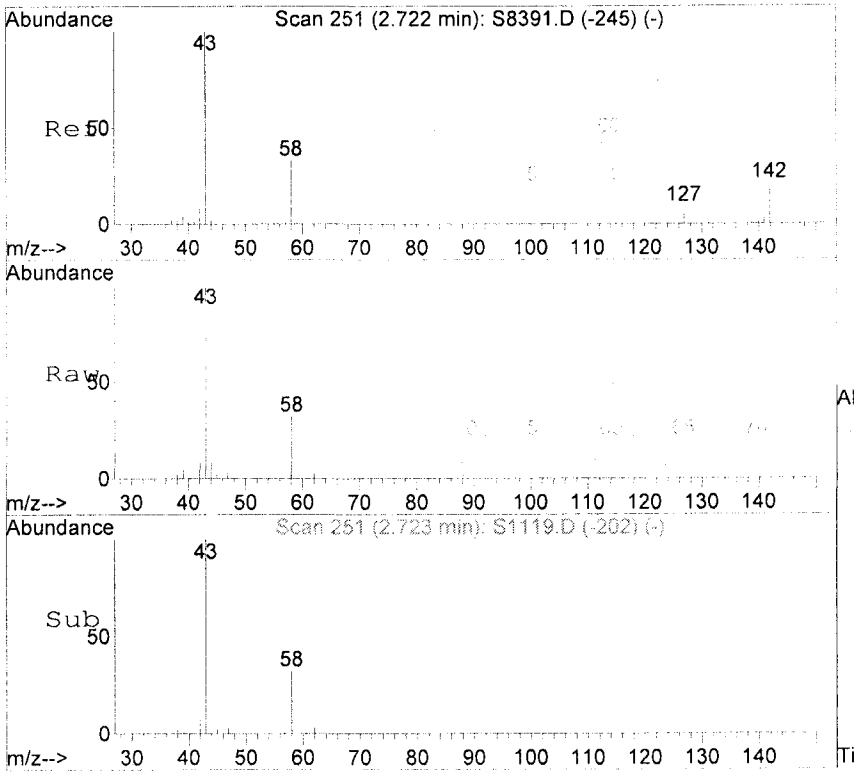


#4
C020 Vinyl chloride
Concen: 16.86 ug/L
RT: 1.53 min Scan# 55
Delta R.T. 0.00 min
Lab File: S1119.D
Acq: 24 Nov 2009 18:19

Tgt Ion: 62 Resp: 102875

Ion	Ratio	Lower	Upper
62	100		
64	31.7	9.4	69.4

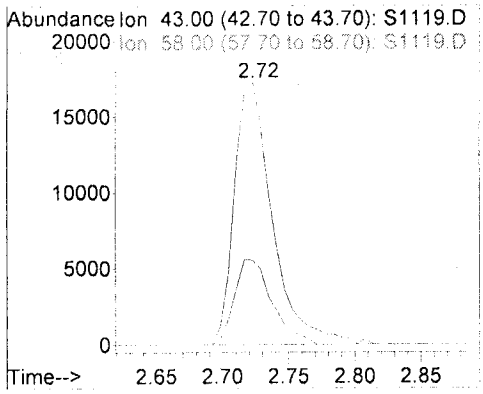


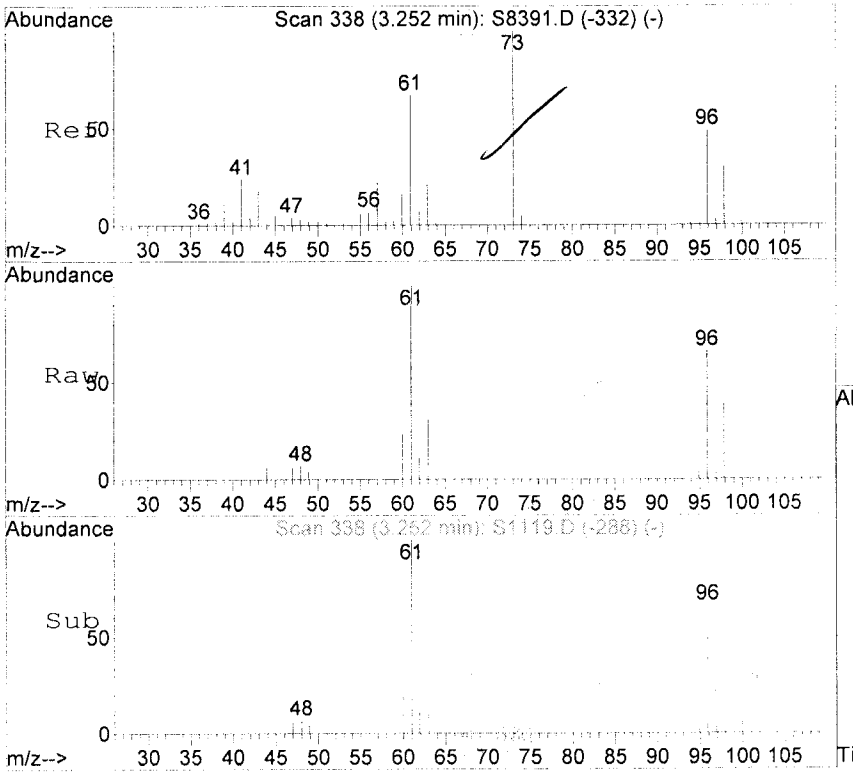


#13
C035 Acetone
Concen: 25.74 ug/L
RT: 2.72 min Scan# 251
Delta R.T. -0.00 min
Lab File: S1119.D
Acq: 24 Nov 2009 18:19

Tgt Ion: 43 Resp: 34640

Ion	Ratio	Lower	Upper
43	100		
58	32.1	1.4	61.4

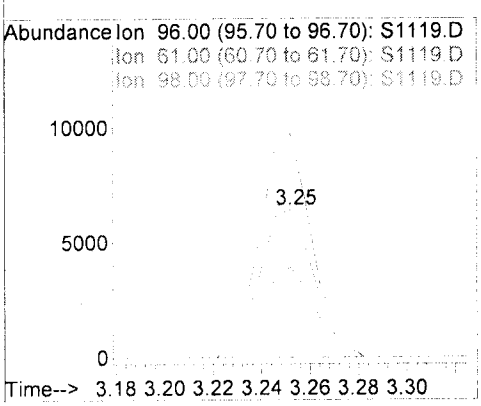


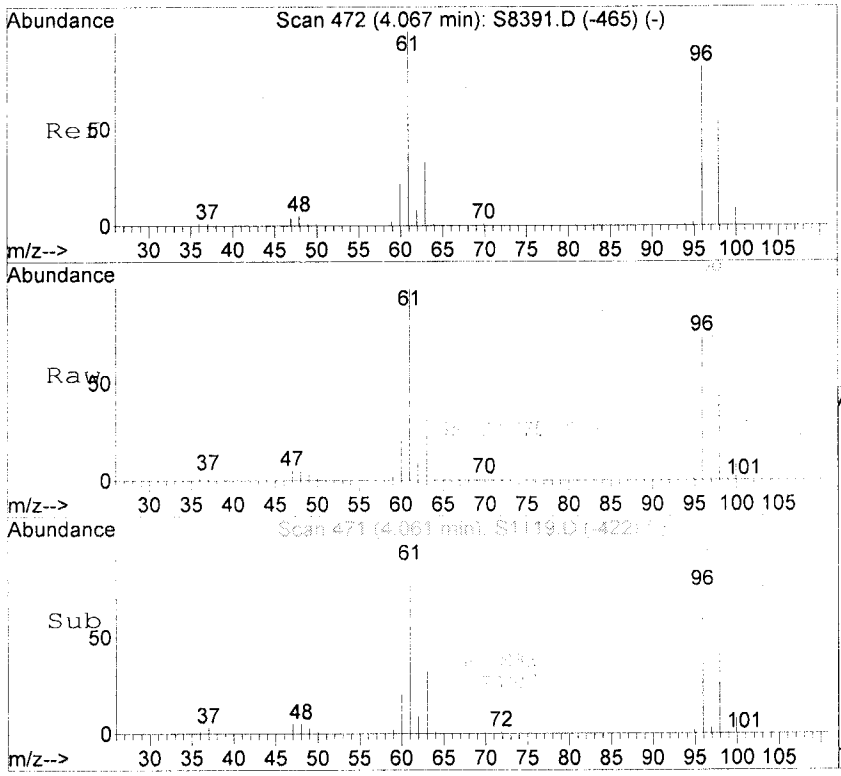


#18
C057 trans-1,2-Dichloroethene
Concen: 2.13 ug/L
RT: 3.25 min Scan# 338
Delta R.T. 0.01 min
Lab File: S1119.D
Acq: 24 Nov 2009 18:19

Tgt Ion: 96 Resp: 9951

Ion	Ratio	Lower	Upper
96	100		
61	151.9	111.5	171.5
98	61.4	33.0	93.0

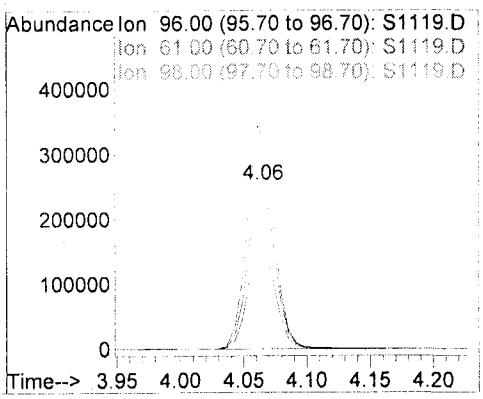


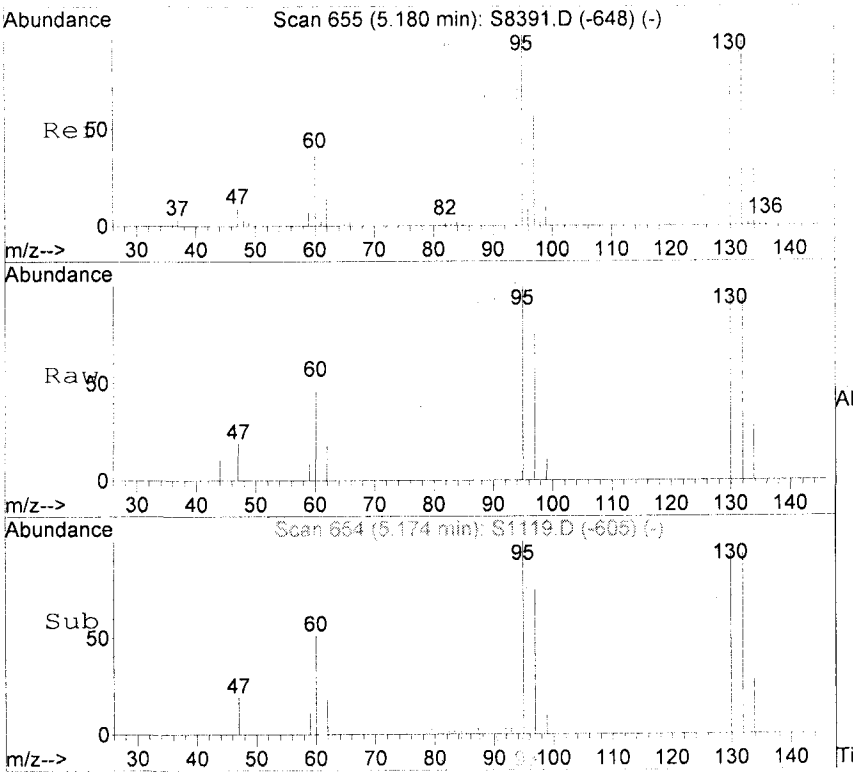


#23
C056 cis-1,2-Dichloroethene
Concen: 74.11 ug/L
RT: 4.06 min Scan# 471
Delta R.T. -0.00 min
Lab File: S1119.D
Acq: 24 Nov 2009 18:19

Tgt Ion: 96 Resp: 381837

Ion	Ratio	Lower	Upper
96	100		
61	135.8	99.9	159.9
98	64.0	31.8	91.8

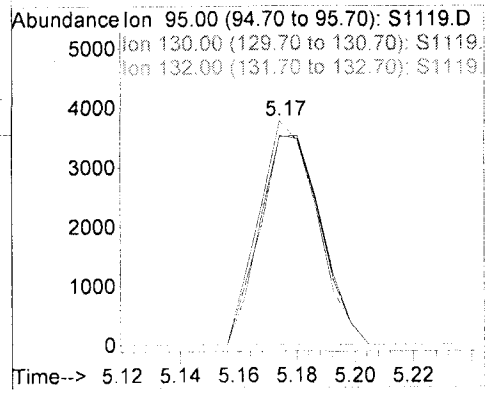


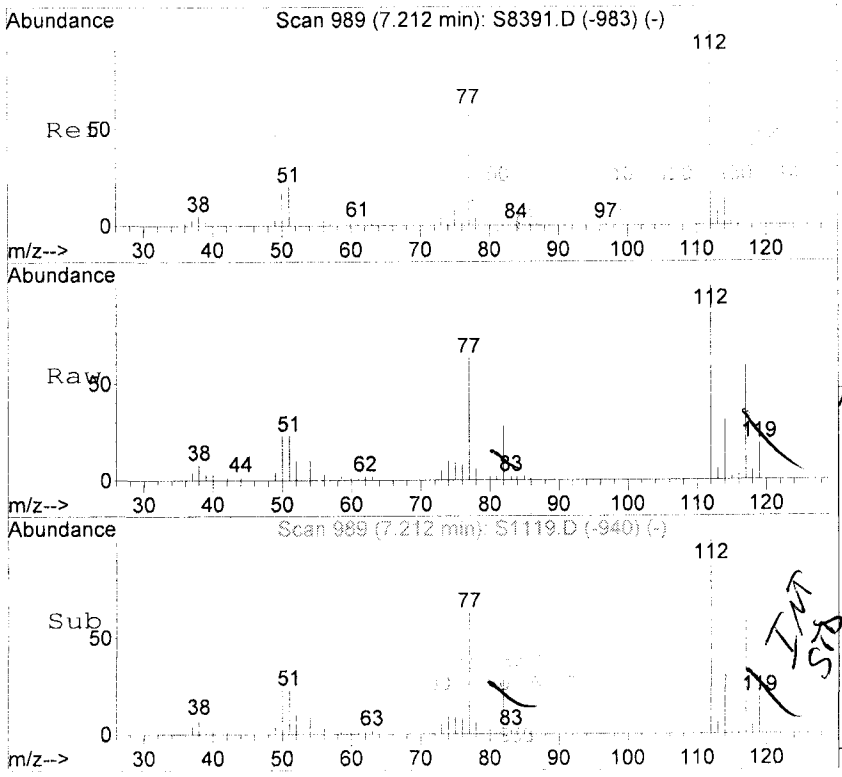


#36
C150 Trichloroethene
Concen: 1.07 ug/L
RT: 5.17 min Scan# 654
Delta R.T. -0.00 min
Lab File: S1119.D
Acq: 24 Nov 2009 18:19

Tgt Ion: 95 Resp: 5253

Ion	Ratio	Lower	Upper
95	100		
130	93.0	77.6	137.6
132	93.4	72.8	132.8

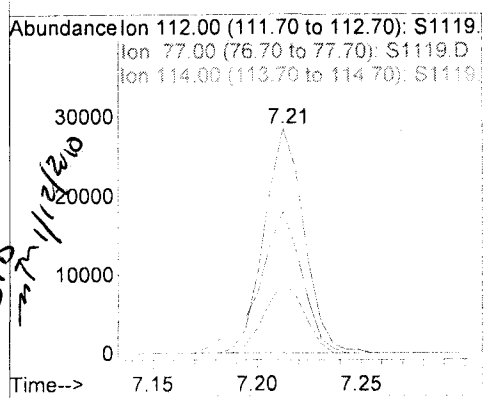


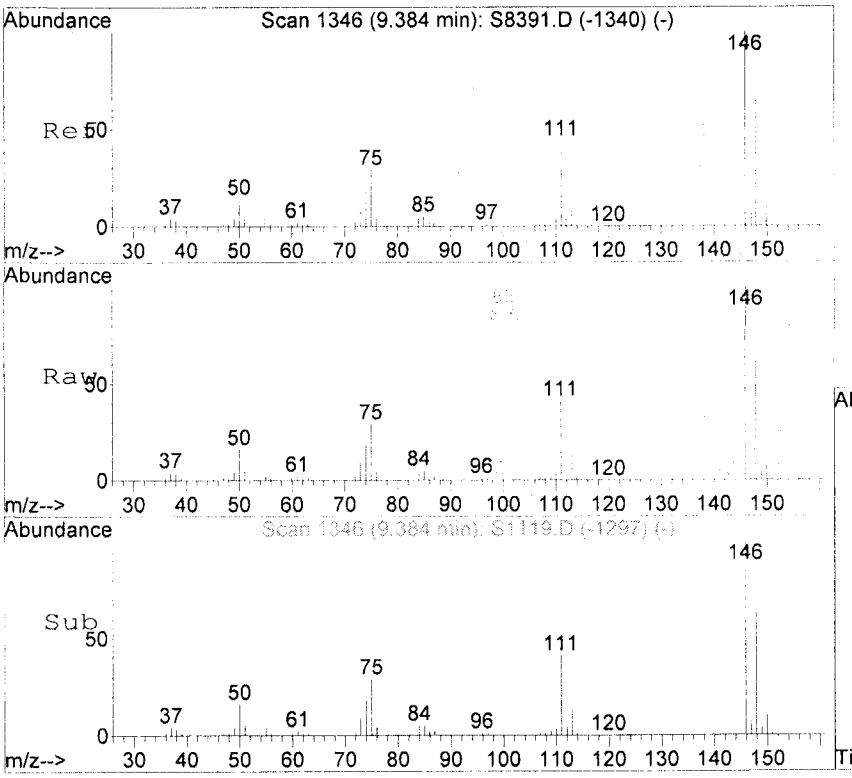


#55
C235 Chlorobenzene
Concen: 2.78 ug/L
RT: 7.21 min Scan# 989
Delta R.T. -0.00 min
Lab File: S1119.D
Acq: 24 Nov 2009 18:19

Tgt Ion:112 Resp: 37936

Ion	Ratio	Lower	Upper
112	100		
77	62.9	28.5	88.5
114	31.5	2.2	62.2

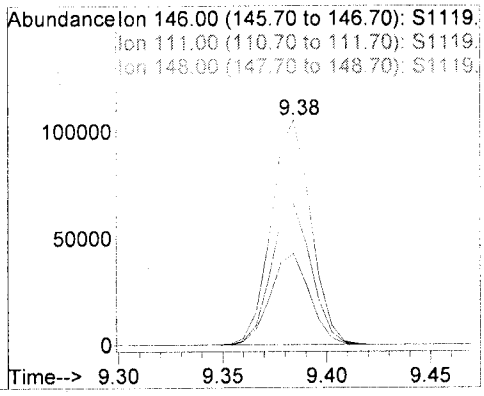




#79
C249 1,2-Dichlorobenzene
Concen: 14.05 ug/L
RT: 9.38 min Scan# 1346
Delta R.T. -0.00 min
Lab File: S1119.D
Acq: 24 Nov 2009 18:19

Tgt Ion:146 Resp: 139409

Ion	Ratio	Lower	Upper
146	100		
111	40.6	8.4	68.4
148	62.8	34.5	94.5



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-3

Laboratory:	TestAmerica Buffalo		SDG:		
Client:	ARCADIS U.S., Inc. - Albany, NY		Project:	Arcadis G&M, Inc. - NY9A8463.4	
Matrix:	Water	Laboratory ID:	RSK0991-03	File ID:	S1120.D
Sampled:	11/17/09 09:02	Prepared:	11/24/09 08:00	Analyzed:	11/24/09 18:44
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	0.82	J
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	12	
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	180	E
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.82	J
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	0.73	J
108-87-2	Methylcyclohexane	1	1.0	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

GW-3

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-03 File ID: S1120.D

Sampled: 11/17/09 09:02 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 18:44

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.0	96	66 - 137	
4-Bromofluorobenzene	25.0	24.1	96	73 - 120	
Toluene-d8	25.0	22.9	92	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	195603	9.05	221647	9.05	
1,4-Difluorobenzene	380713	4.99	401345	4.99	
Chlorobenzene-d5	205627	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1120.D Vial: 23
Acq On : 24 Nov 2009 18:44 Operator: DHC
Sample : RSK0991-03 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:38 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	380713	25.00 ug/L	0.00 94.86%
43) CI20	Chlorobenzene-D5	7.19	82	205627	25.00 ug/L	0.00 92.62%
63) CI30	1,4-Dichlorobenzene-	9.05	152	195603	25.00 ug/L	0.00 88.25%
System Monitoring Compounds						
26) CS87	Dibromofluoromethane	4.44	111	97634	23.71 ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	94.84%	
31) CS15	1,2-Dichloroethane-D	4.69	65	129956	24.04 ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	96.16%	
44) CS05	Toluene-D8	6.07	98	417071	22.93 ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	91.72%	
62) CS10	p-Bromofluorobenzene	8.12	174	132605	24.08 ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	96.32%	
Target Compounds						Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.	
3) C010	Chloromethane	0.00	50	0	N.D.	
4) C020	Vinyl chloride	1.53	62	2227	N.D.	
5) C015	Bromomethane	0.00	94	0	N.D.	
6) C025	Chloroethane	1.90	64	153814	184.42 ug/L	89
7) C275	Trichlorofluoromet	0.00	101	0	N.D.	
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030	Methylene chloride	0.00	84	0	N.D.	
10) C040	Carbon disulfide	2.77	76	1860	N.D.	
11) C036	Acrolein	0.00	56	0	N.D.	
12) C038	Acrylonitrile	0.00	53	0	N.D.	
13) C035	Acetone	2.72	43	15226	11.60 ug/L	98
14) C300	Acetonitrile	0.00	41	0	N.D.	
15) C276	Iodomethane	0.00	142	0	N.D.	
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.	
17) C962	T-butyl Methyl Ether	3.26	73	7527	0.73 ug/L	99
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255	Methyl Acetate	2.99	43	301	N.D.	
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.	
21) C125	Vinyl Acetate	0.00	43	0	N.D.	
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056	cis-1,2-Dichloroethe	4.06	96	4114	0.82 ug/L	96
24) C272	Tetrahydrofuran	0.00	42	0	N.D.	
25) C222	Bromochloromethane	0.00	128	0	N.D.	
27) C060	Chloroform	0.00	83	0	N.D.	
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120	Carbon tetrachlori	0.00	117	0	N.D.	
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165	Benzene	4.69	78	898	N.D.	
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110	2-Butanone	4.13	43	1537	N.D.	
35) C256	Cyclohexane	0.00	56	0	N.D.	
36) C150	Trichloroethene	0.00	95	0	N.D.	
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278	Dibromomethane	0.00	93	0	N.D.	

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1120.D Vial: 23
Acq On : 24 Nov 2009 18:44 Operator: DHC
Sample : RSK0991-03 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:38 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	1115	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1565	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.19	91	565	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.12	91	281	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	9.38	146	1651	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	0.00	128	0	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

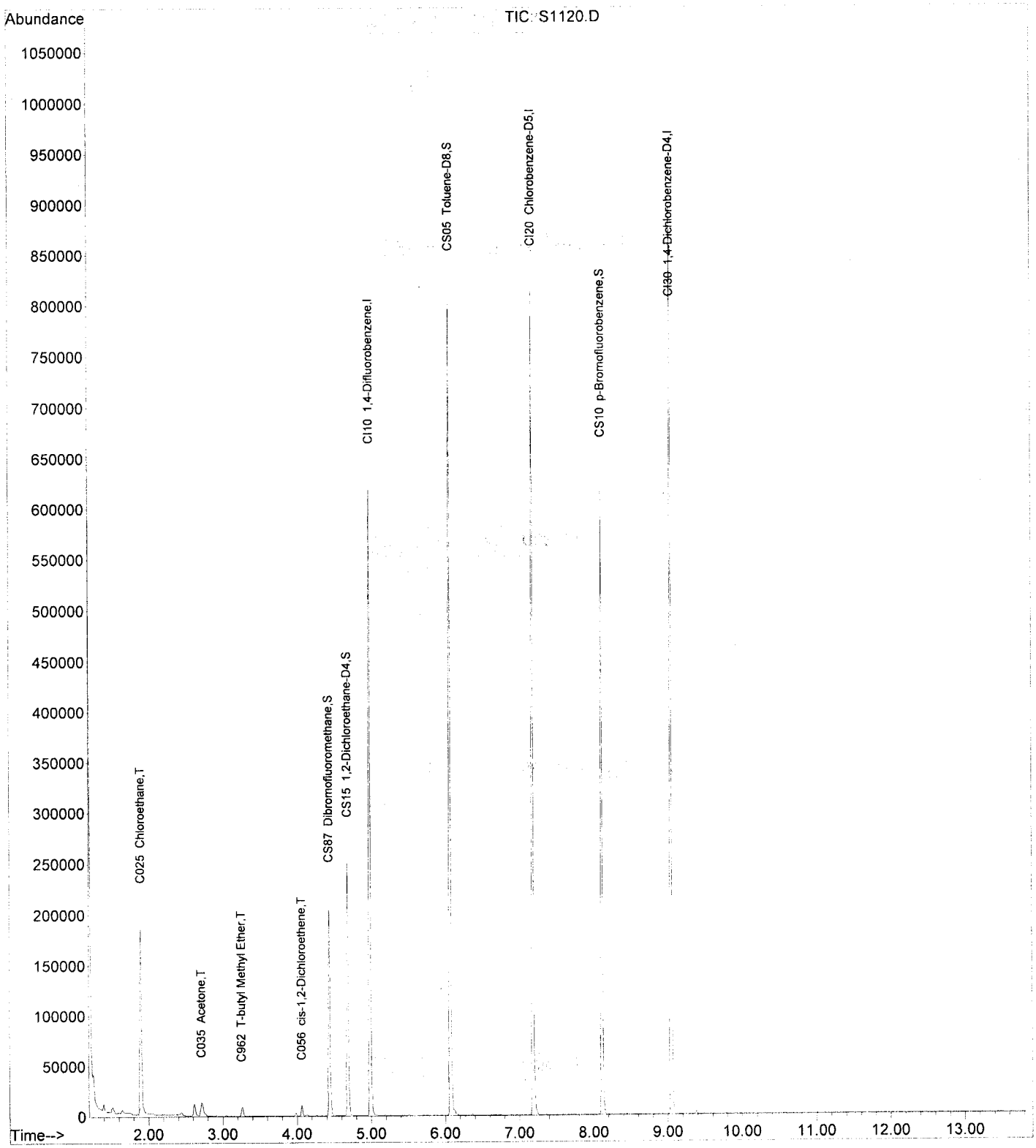
11/24/10

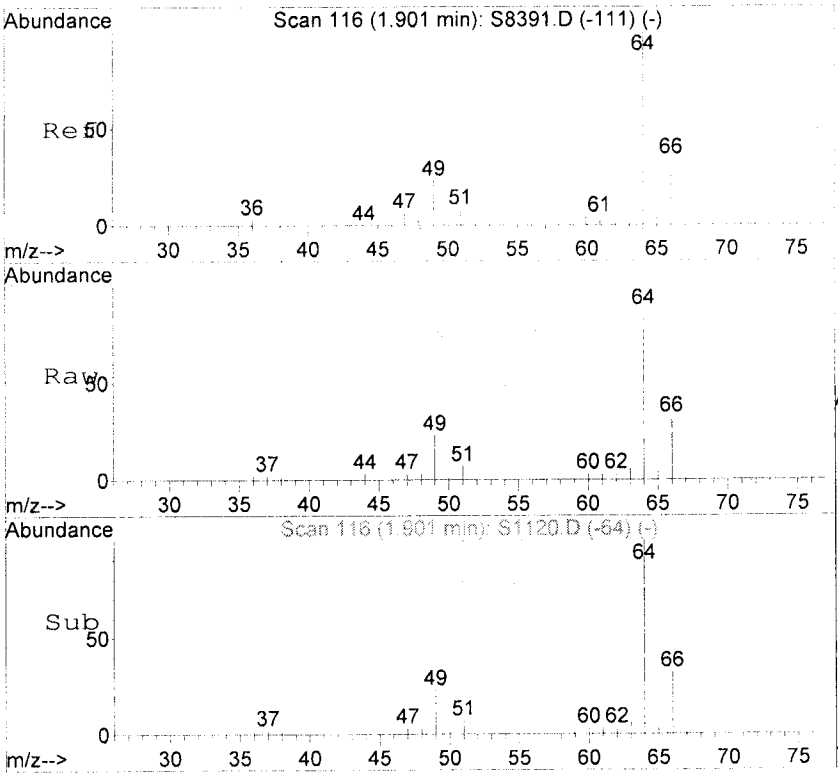
Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1120.D
Acq On : 24 Nov 2009 18:44
Sample : RSK0991-03
Misc :
MS Integration Params: RTEINT.P

Vial: 23
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 09:33:38 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA

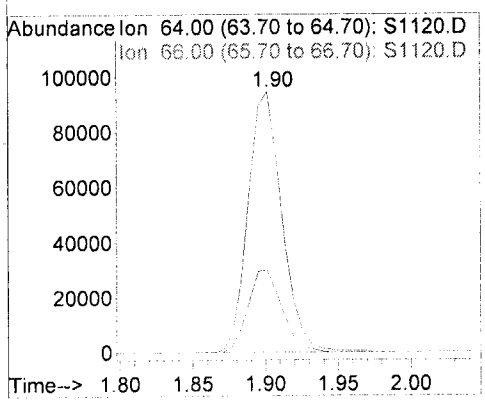


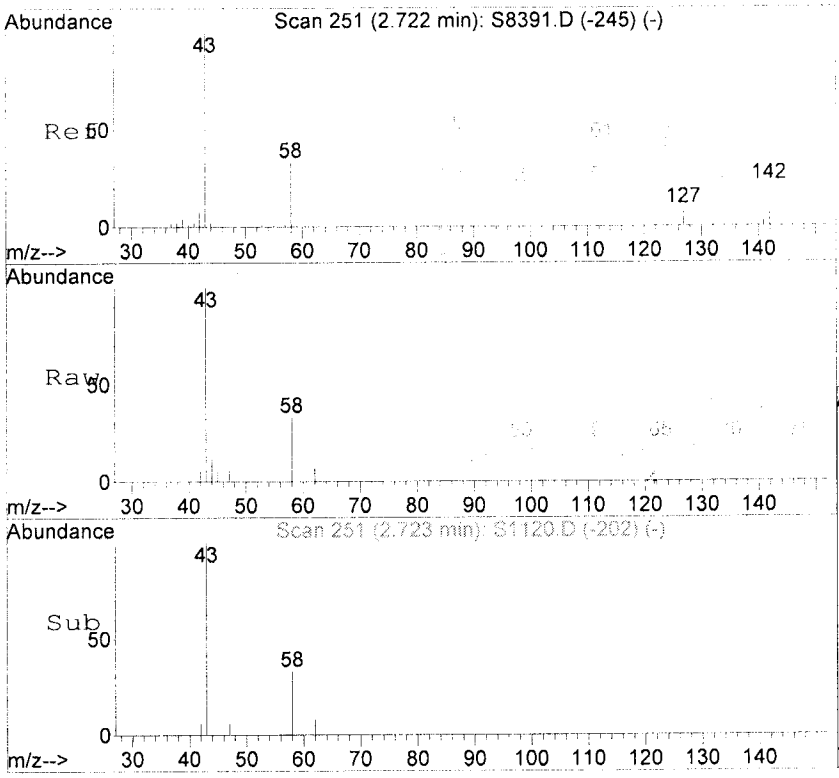


#6
C025 Chloroethane
Concen: 184.42 ug/L
RT: 1.90 min Scan# 116
Delta R.T. 0.02 min
Lab File: S1120.D
Acq: 24 Nov 2009 18:44

Tgt Ion: 64 Resp: 153814

Ion	Ratio	Lower	Upper
64	100		
66	31.5	8.3	68.3

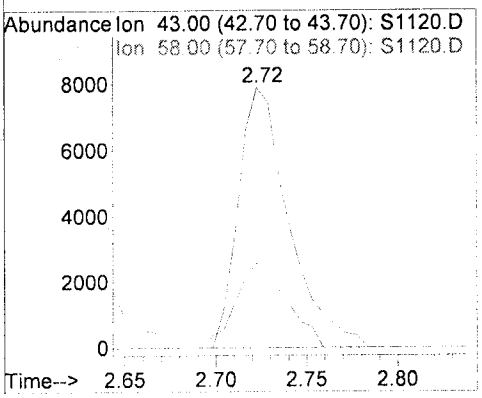


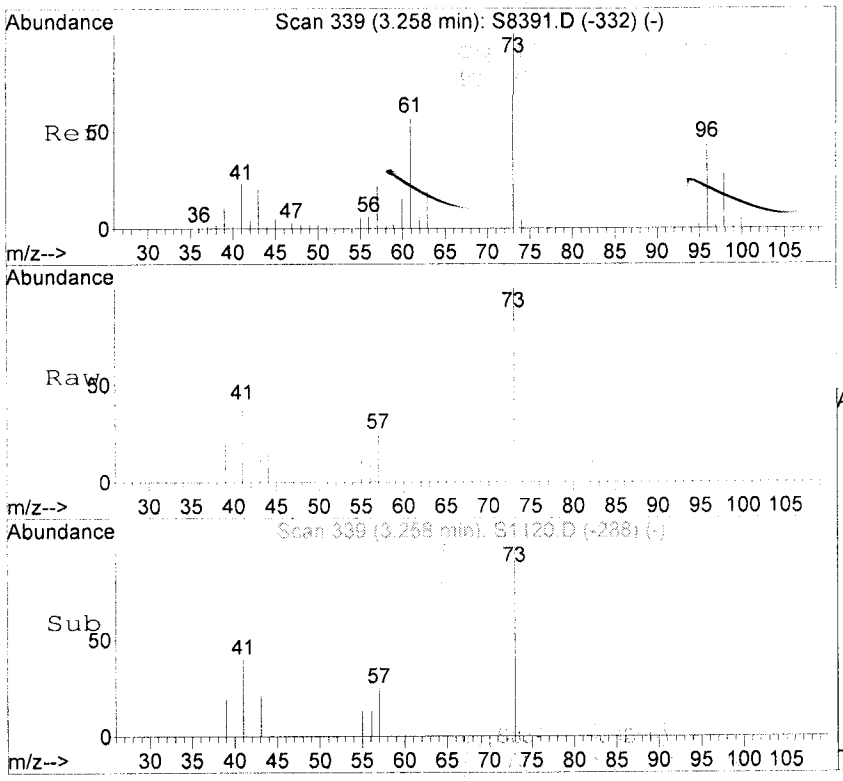


#13
C035 Acetone
Concen: 11.60 ug/L
RT: 2.72 min Scan# 251
Delta R.T. 0.00 min
Lab File: S1120.D
Acq: 24 Nov 2009 18:44

Tgt Ion: 43 Resp: 15226

Ion	Ratio	Lower	Upper
43	100		
58	32.5	1.4	61.4

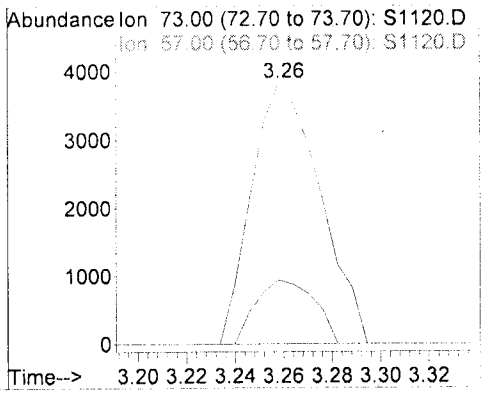


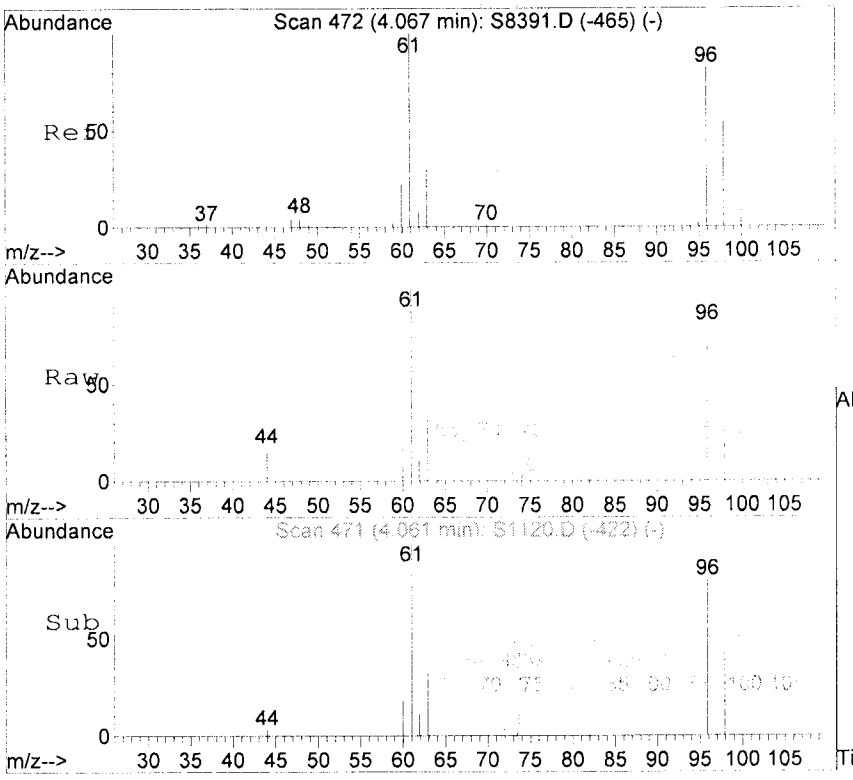


#17
C962 T-butyl Methyl Ether
Concen: 0.73 ug/L
RT: 3.26 min Scan# 339
Delta R.T. 0.01 min
Lab File: S1120.D
Acq: 24 Nov 2009 18:44

Tgt Ion: 73 Resp: 7527

Ion	Ratio	Lower	Upper
73	100		
57	20.8	0.0	50.5

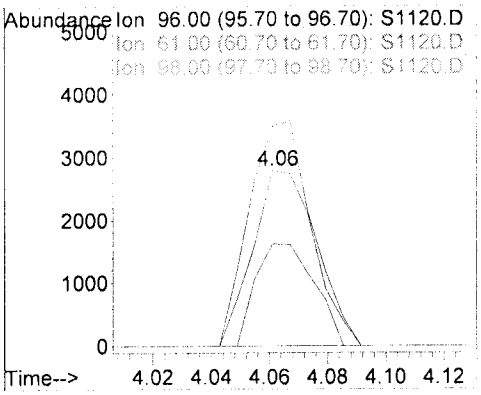




#23
C056 cis-1,2-Dichloroethene
Concen: 0.82 ug/L
RT: 4.06 min Scan# 471
Delta R.T. 0.00 min
Lab File: S1120.D
Acq: 24 Nov 2009 18:44

Tgt Ion: 96 Resp: 4114

Ion	Ratio	Lower	Upper
96	100		
61	125.2	99.9	159.9
98	57.9	31.8	91.8



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-3

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-03RE1 File ID: S1135.D

Sampled: 11/17/09 09:02 Prepared: 11/24/09 08:00 Analyzed: 11/25/09 12:43

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	4	4.0	UD
79-34-5	1,1,2,2-Tetrachloroethane	4	4.0	UD
79-00-5	1,1,2-Trichloroethane	4	4.0	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	4	4.0	UD
75-34-3	1,1-Dichloroethane	4	4.0	UD
75-35-4	1,1-Dichloroethene	4	4.0	UD
120-82-1	1,2,4-Trichlorobenzene	4	4.0	UD
96-12-8	1,2-Dibromo-3-chloropropane	4	4.0	UD
106-93-4	1,2-Dibromoethane (EDB)	4	4.0	UD
95-50-1	1,2-Dichlorobenzene	4	4.0	UD
107-06-2	1,2-Dichloroethane	4	4.0	UD
540-59-0	1,2-Dichloroethene, Total	4	8.0	UD
78-87-5	1,2-Dichloropropane	4	4.0	UD
541-73-1	1,3-Dichlorobenzene	4	4.0	UD
106-46-7	1,4-Dichlorobenzene	4	4.0	UD
78-93-3	2-Butanone (MEK)	4	20	UD
591-78-6	2-Hexanone	4	20	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	4	20	UD
67-64-1	Acetone	4	10	JD
71-43-2	Benzene	4	4.0	UD
75-27-4	Bromodichloromethane	4	4.0	UD
75-25-2	Bromoform	4	4.0	UD
74-83-9	Bromomethane	4	4.0	UD
75-15-0	Carbon disulfide	4	4.0	UD
56-23-5	Carbon Tetrachloride	4	4.0	UD
108-90-7	Chlorobenzene	4	4.0	UD
124-48-1	Chlorodibromomethane	4	4.0	UD
75-00-3	Chloroethane	4	170	D
67-66-3	Chloroform	4	4.0	UD
74-87-3	Chloromethane	4	4.0	UD
156-59-2	cis-1,2-Dichloroethene	4	4.0	UD
10061-01-5	cis-1,3-Dichloropropene	4	4.0	UD
110-82-7	Cyclohexane	4	4.0	UD
75-71-8	Dichlorodifluoromethane	4	4.0	UD
100-41-4	Ethylbenzene	4	4.0	UD
98-82-8	Isopropylbenzene	4	4.0	UD
79-20-9	Methyl Acetate	4	4.0	UD
1634-04-4	Methyl tert-Butyl Ether	4	4.0	UD
108-87-2	Methylcyclohexane	4	4.0	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-3

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	RSK0991-03RE1	File ID:	S1135.D
Sampled:	11/17/09 09:02	Prepared:	11/24/09 08:00	Analyzed:	11/25/09 12:43
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9K25014	Sequence:	RK92506	Calibration:	R9K2009
Instrument:	HP5973S				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	4	4.0	UD
100-42-5	Styrene	4	4.0	UD
127-18-4	Tetrachloroethene	4	4.0	UD
108-88-3	Toluene	4	4.0	UD
156-60-5	trans-1,2-Dichloroethene	4	4.0	UD
10061-02-6	trans-1,3-Dichloropropene	4	4.0	UD
79-01-6	Trichloroethene	4	4.0	UD
75-69-4	Trichlorofluoromethane	4	4.0	UD
108-05-4	Vinyl acetate	4	20	UD
75-01-4	Vinyl chloride	4	4.0	UD
1330-20-7	Xylenes, total	4	8.0	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.8	95	66 - 137	D
4-Bromofluorobenzene	25.0	24.4	98	73 - 120	D
Toluene-d8	25.0	23.4	94	71 - 126	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	190987	9.06	219341	9.06	
1,4-Difluorobenzene	382168	4.99	394951	4.99	
Chlorobenzene-d5	207495	7.19	219500	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1135.D Vial: 9
Acq On : 25 Nov 2009 12:43 Operator: DHC
Sample : RSK0991-03RE1@4X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:39 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	382168	25.00	ug/L	0.00 96.76%
43) CI20	Chlorobenzene-D5	7.19	82	207495	25.00	ug/L	0.00 94.53%
63) CI30	1,4-Dichlorobenzene-	9.06	152	190987	25.00	ug/L	0.00 87.07%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	98574	23.85	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	95.40%		
31) CS15	1,2-Dichloroethane-D	4.69	65	128933	23.76	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	95.04%		
44) CS05	Toluene-D8	6.07	98	429554	23.40	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	93.60%		
62) CS10	p-Bromofluorobenzene	8.12	174	135484	24.38	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	97.52%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.		
3) C010	Chloromethane	0.00	50	0	N.D.		
4) C020	Vinyl chloride	1.54	62	625	N.D.		
5) C015	Bromomethane	0.00	94	0	N.D.		
6) C025	Chloroethane	1.90	64	35031	41.84	ug/L	89
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.		
9) C030	Methylene chloride	3.04	84	453	N.D.		
10) C040	Carbon disulfide	2.77	76	887	N.D.		
11) C036	Acrolein	0.00	56	0	N.D.		
12) C038	Acrylonitrile	0.00	53	0	N.D.		
13) C035	Acetone	2.73	43	3373	2.56	ug/L	90
14) C300	Acetonitrile	0.00	41	0	N.D.		
15) C276	Iodomethane	0.00	142	0	N.D.		
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	3.26	73	1693	N.D.		
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.		
19) C255	Methyl Acetate	0.00	43	0	N.D.		
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.		
21) C125	Vinyl Acetate	0.00	43	0	N.D.		
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.		
23) C056	cis-1,2-Dichloroet	4.06	96	1476	N.D.		
24) C272	Tetrahydrofuran	4.33	42	137	N.D.		
25) C222	Bromochloromethane	0.00	128	0	N.D.		
27) C060	Chloroform	0.00	83	0	N.D.		
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.		
29) C120	Carbon tetrachlori	0.00	117	0	N.D.		
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.		
32) C165	Benzene	4.70	78	345	N.D.		
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.		
34) C110	2-Butanone	0.00	43	0	N.D.		
35) C256	Cyclohexane	0.00	56	0	N.D.		
36) C150	Trichloroethene	0.00	95	0	N.D.		
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1135.D Vial: 9
Acq On : 25 Nov 2009 12:43 Operator: DHC
Sample : RSK0991-03RE1@4X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:39 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	795	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1713	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.19	91	574	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.12	91	150	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	9.00	146	138	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	9.07	146	335	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	0.00	128	0	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

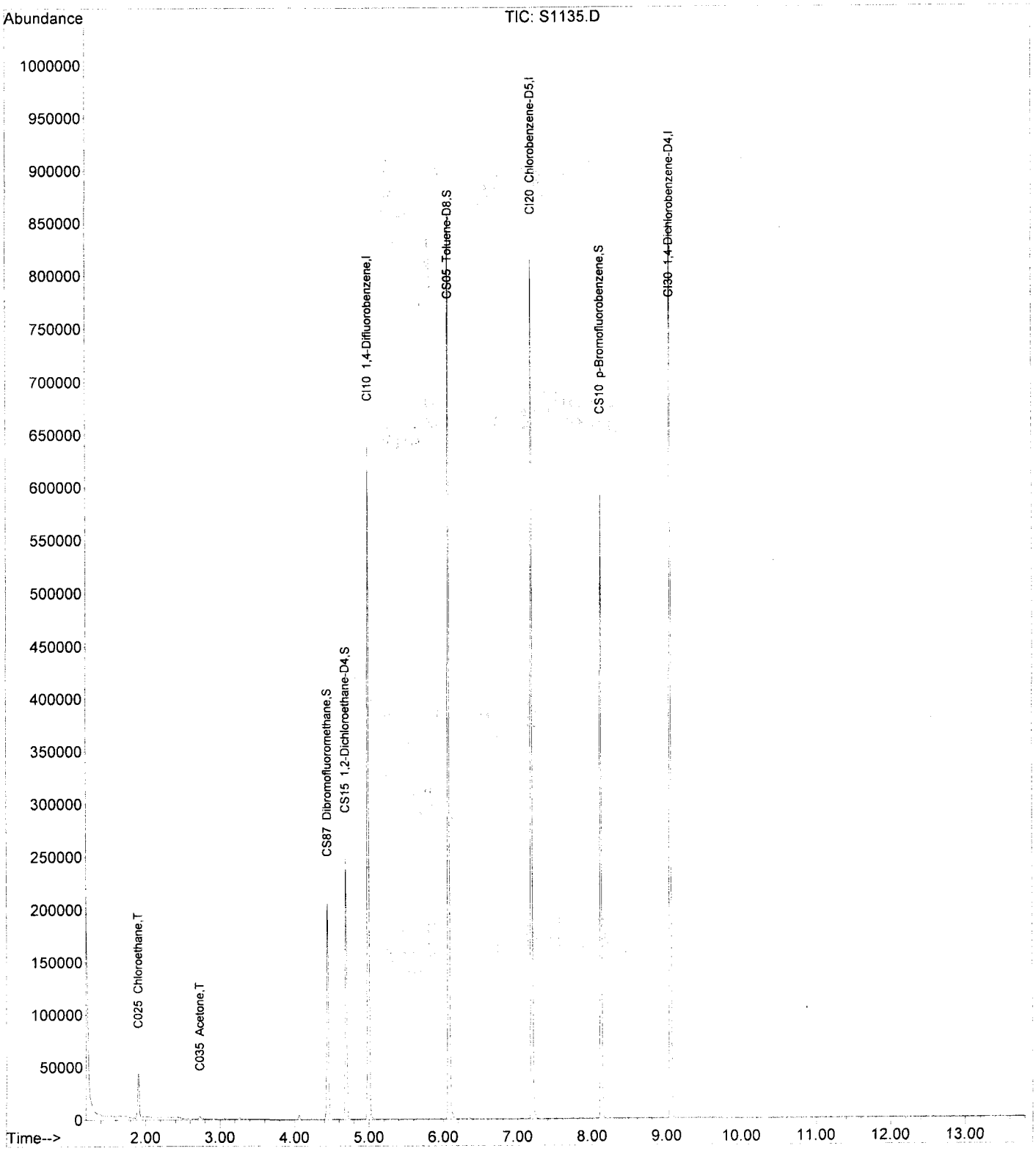
(#) = qualifier out of range (m) = manual integration (+) = signals summed

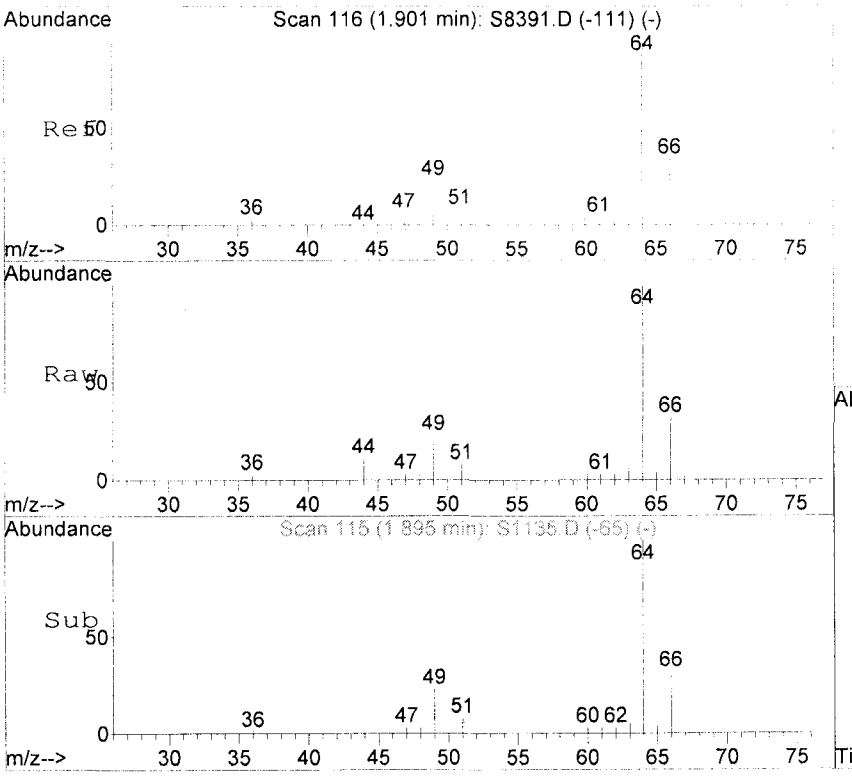
1/12/10

Data File : D:\MSDCHEM\S\DATA\112509\S1135.D
Acq On : 25 Nov 2009 12:43
Sample : RSK0991-03RE1@4X
Misc :
MS Integration Params: RTEINT.P

Vial: 9
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 15:10:39 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA

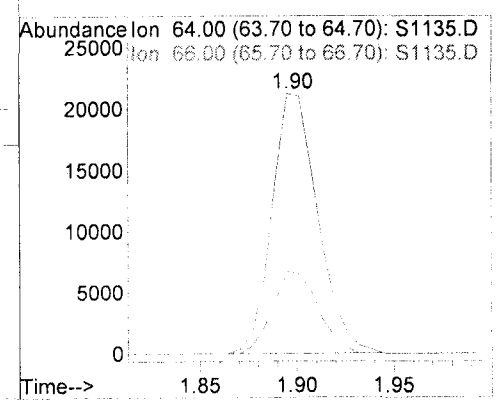


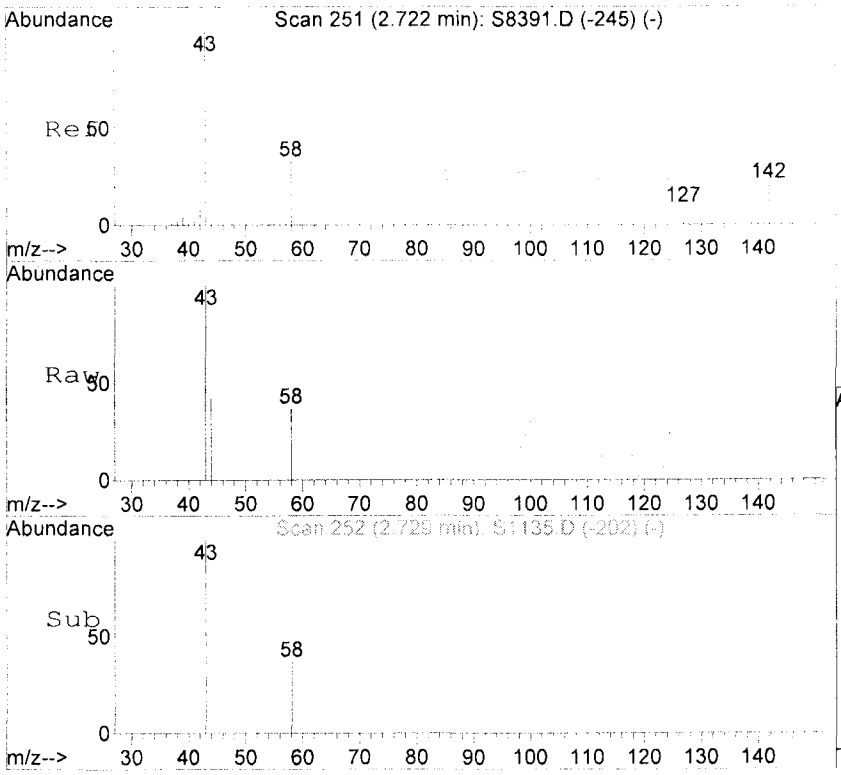


#6
C025 Chloroethane
Concen: 41.84 ug/L
RT: 1.90 min Scan# 115
Delta R.T. 0.01 min
Lab File: S1135.D
Acq: 25 Nov 2009 12:43

Tgt Ion: 64 Resp: 35031

Ion	Ratio	Lower	Upper
64	100		
66	31.5	8.3	68.3

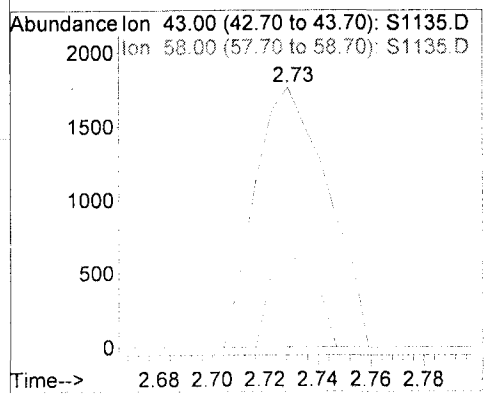




#13
C035 Acetone
Concen: 2.56 ug/L
RT: 2.73 min Scan# 252
Delta R.T. 0.01 min
Lab File: S1135.D
Acq: 25 Nov 2009 12:43

Tgt Ion: 43 Resp: 3373

Ion	Ratio	Lower	Upper
43	100		
58	36.9	1.4	61.4



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-4

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-04 File ID: S1121.D

Sampled: 11/17/09 11:10 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 19:08

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	2.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-4

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	RSK0991-04	File ID:	S1121.D
Sampled:	11/17/09 11:10	Prepared:	11/24/09 08:00	Analyzed:	11/24/09 19:08
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9K24017	Sequence:	RK92405	Calibration:	R9K2009
Instrument:	HP5973S				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.7	95	66 - 137	
4-Bromofluorobenzene	25.0	24.5	98	73 - 120	
Toluene-d8	25.0	24.0	96	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	195089	9.05	221647	9.05	
1,4-Difluorobenzene	380485	4.99	401345	4.99	
Chlorobenzene-d5	205142	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1121.D Vial: 24
Acq On : 24 Nov 2009 19:08 Operator: DHC
Sample : RSK0991-04 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:43 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

11/25/09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	4.99	114	380485	25.00 ug/L	0.00 94.80%
43) CI20 Chlorobenzene-D5	7.19	82	205142	25.00 ug/L	0.00 92.40%
63) CI30 1,4-Dichlorobenzene-	9.05	152	195089	25.00 ug/L	0.00 88.02%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.44	111	99768	24.25 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 97.00%		
31) CS15 1,2-Dichloroethane-D	4.69	65	127872	23.67 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery = 94.68%		
44) CS05 Toluene-D8	6.07	98	436168	24.03 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery = 96.12%		
62) CS10 p-Bromofluorobenzene	8.12	174	134558	24.49 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery = 97.96%		
Target Compounds					Qvalue
2) C290 Dichlorodifluorome	0.00	85	0	N.D.	
3) C010 Chloromethane	0.00	50	0	N.D.	
4) C020 Vinyl chloride	0.00	62	0	N.D.	
5) C015 Bromomethane	0.00	94	0	N.D.	
6) C025 Chloroethane	0.00	64	0	N.D.	
7) C275 Trichlorofluoromet	0.00	101	0	N.D.	
8) C045 1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030 Methylene chloride	0.00	84	0	N.D.	
10) C040 Carbon disulfide	2.77	76	2552	N.D.	
11) C036 Acrolein	0.00	56	0	N.D.	
12) C038 Acrylonitrile	0.00	53	0	N.D.	
13) C035 Acetone	2.72	43	6630	5.05 ug/L	96
14) C300 Acetonitrile	0.00	41	0	N.D.	
15) C276 Iodomethane	0.00	142	0	N.D.	
16) C291 1,1,2-Trichloro-1,	0.00	101	0	N.D.	
17) C962 T-butyl Methyl Eth	3.26	73	420	N.D.	
18) C057 trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255 Methyl Acetate	0.00	43	0	N.D.	
20) C050 1,1-Dichloroethane	0.00	63	0	N.D.	
21) C125 Vinyl Acetate	3.64	43	130	N.D.	
22) C051 2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056 cis-1,2-Dichloroet	4.07	96	741	N.D.	
24) C272 Tetrahydrofuran	0.00	42	0	N.D.	
25) C222 Bromochloromethane	0.00	128	0	N.D.	
27) C060 Chloroform	0.00	83	0	N.D.	
28) C115 1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120 Carbon tetrachlori	0.00	117	0	N.D.	
30) C116 1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165 Benzene	4.70	78	580	N.D.	
33) C065 1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110 2-Butanone	4.13	43	785	N.D.	
35) C256 Cyclohexane	0.00	56	0	N.D.	
36) C150 Trichloroethene	0.00	95	0	N.D.	
37) C140 1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278 Dibromomethane	0.00	93	0	N.D.	

1/12/10

Data File : D:\MSDCHEM\S\DATA\112409\S1121.D Vial: 24
Acq On : 24 Nov 2009 19:08 Operator: DHC
Sample : RSK0991-04 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:43 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	5.28	83	144	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	677	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.01	43	142	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.19	91	549	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	8.26	83	865	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.12	91	138	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	8.75	105	317	N.D.	
75) C308	sec-Butylbenzene	8.75	105	317	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	9.17	119	306	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	9.38	146	143	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	0.00	128	0	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

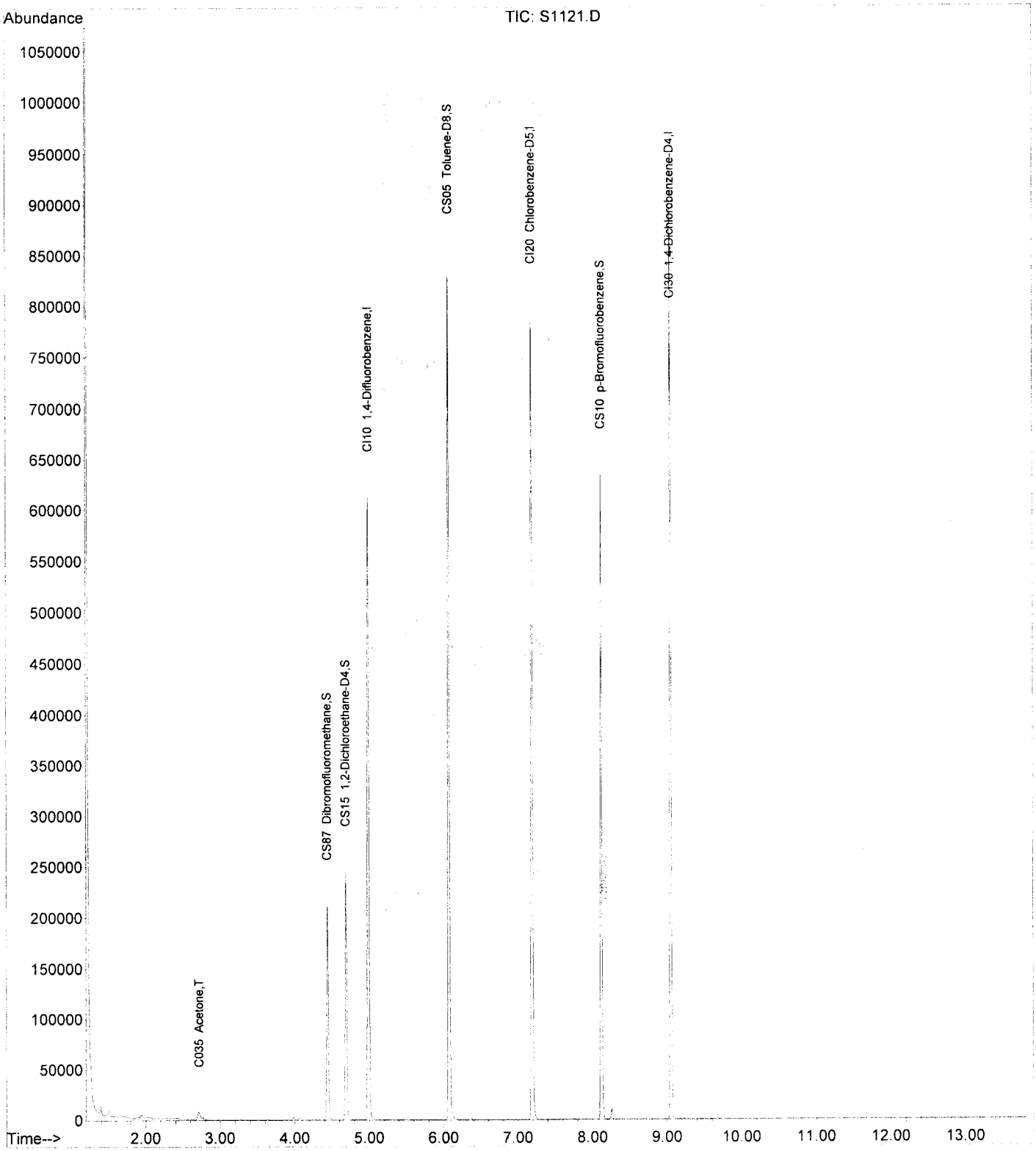
(#) = qualifier out of range (m) = manual integration (+) = signals summed

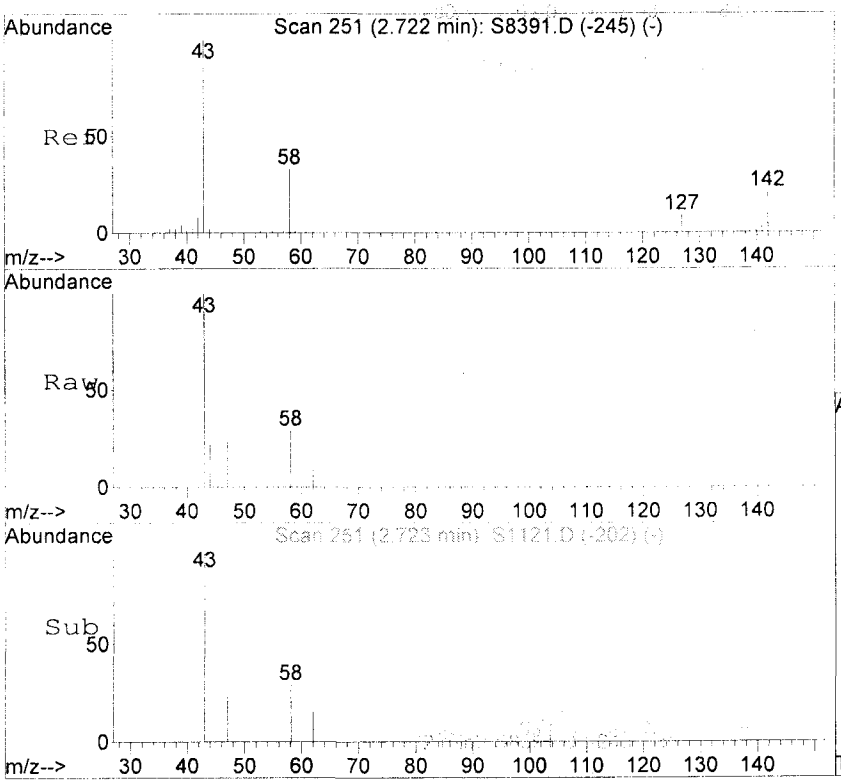
1/12/10

Data File : D:\MSDCHEM\S\DATA\112409\S1121.D
Acq On : 24 Nov 2009 19:08
Sample : RSK0991-04
Misc :
MS Integration Params: RTEINT.P

Vial: 24
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 09:33:43 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA

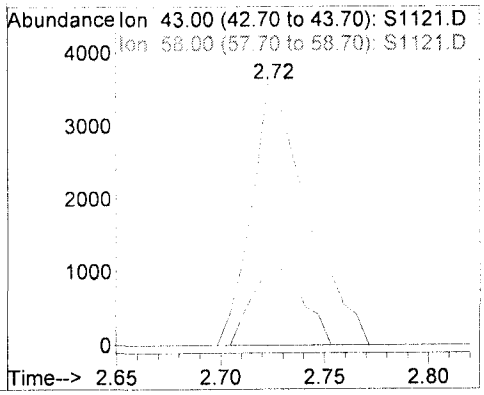




#13
C035 Acetone
Concen: 5.05 ug/L
RT: 2.72 min Scan# 251
Delta R.T. 0.00 min
Lab File: S1121.D
Acq: 24 Nov 2009 19:08

Tgt Ion: 43 Resp: 6630

Ion	Ratio	Lower	Upper
43	100		
58	29.4	1.4	61.4



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-6

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-05 File ID: S1122.D

Sampled: 11/18/09 11:15 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 19:32

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	0.80	J
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	4.7	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	4.7	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.9	
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

GW-6

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	RSK0991-05	File ID:	S1122.D
Sampled:	11/18/09 11:15	Prepared:	11/24/09 08:00	Analyzed:	11/24/09 19:32
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9K24017	Sequence:	RK92405	Calibration:	R9K2009
Instrument:	HP5973S				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	500	E
108-88-3	Toluene	1	46	
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	27	
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	5.2	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.7	95	66 - 137	
4-Bromofluorobenzene	25.0	24.5	98	73 - 120	
Toluene-d8	25.0	22.9	92	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	205433	9.05	221647	9.05	
1,4-Difluorobenzene	389949	4.99	401345	4.99	
Chlorobenzene-d5	215292	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1122.D Vial: 25
Acq On : 24 Nov 2009 19:32 Operator: DHC
Sample : RSK0991-05 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:49 2009 Results File: R9K2009-SIXPT.RES

RET elot

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	389949	25.00 ug/L	0.00 97.16%
43) CI20	Chlorobenzene-D5	7.19	82	215292	25.00 ug/L	0.00 96.97%
63) CI30	1,4-Dichlorobenzene-	9.05	152	205433	25.00 ug/L	0.00 92.68%
System Monitoring Compounds						
26) CS87	Dibromofluoromethane	4.44	111	99521	23.60 ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	94.40%	
31) CS15	1,2-Dichloroethane-D	4.69	65	131315	23.72 ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	94.88%	
44) CS05	Toluene-D8	6.07	98	436739	22.93 ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	91.72%	
62) CS10	p-Bromofluorobenzene	8.12	174	141165	24.48 ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	97.92%	
Target Compounds						Qvalue
2) C290	Dichlorodifluorome	1.26	85	331	N.D.	
3) C010	Chloromethane	0.00	50	0	N.D.	
4) C020	Vinyl chloride	1.53	62	781	N.D.	
5) C015	Bromomethane	0.00	94	0	N.D.	
6) C025	Chloroethane	0.00	64	0	N.D.	
7) C275	Trichlorofluoromet	0.00	101	0	N.D.	
8) C045	1,1-Dichloroethene	2.59	96	130	N.D.	
9) C030	Methylene chloride	0.00	84	0	N.D.	
10) C040	Carbon disulfide	2.77	76	2308	N.D.	
11) C036	Acrolein	0.00	56	0	N.D.	
12) C038	Acrylonitrile	0.00	53	0	N.D.	
13) C035	Acetone	2.73	43	2413	N.D.	
14) C300	Acetonitrile	2.98	41	14856	20.96 ug/L	92
15) C276	Iodomethane	0.00	142	0	N.D.	
16) C291	1,1,2-Trichloro-1,	2.58	101	259	N.D.	
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.	
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255	Methyl Acetate	0.00	43	0	N.D.	
20) C050	1,1-Dichloroethane	3.60	63	6863	0.80 ug/L	97
21) C125	Vinyl Acetate	0.00	43	0	N.D.	
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056	cis-1,2-Dichloroethe	4.07	96	24141	4.69 ug/L	97
24) C272	Tetrahydrofuran	0.00	42	0	N.D.	
25) C222	Bromochloromethane	0.00	128	0	N.D.	
27) C060	Chloroform	0.00	83	0	N.D.	
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120	Carbon tetrachlori	0.00	117	0	N.D.	
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165	Benzene	4.69	78	592	N.D.	
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110	2-Butanone	4.13	43	276	N.D.	
35) C256	Cyclohexane	0.00	56	0	N.D.	
36) C150	Trichloroethene	5.17	95	132167	26.86 ug/L	89
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278	Dibromomethane	0.00	93	0	N.D.	

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1122.D Vial: 25
Acq On : 24 Nov 2009 19:32 Operator: DHC
Sample : RSK0991-05 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:49 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.			
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.			
41) C012	Methylcyclohexane	5.17	83	1308	N.D.			
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.			
45) C230	Toluene	6.12	92	609431	45.68	ug/L		94
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.			
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.			
48) C160	1,1,2-Trichloroethan	6.53	83	50061	14.83	ug/L	#	26
49) C210	4-Methyl-2-pentano	6.07	43	1827	N.D.			
50) C220	Tetrachloroethene	6.53	166	2707108	495.63	ug/L		91
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.			
52) C155	Dibromochlorometha	0.00	129	0	N.D.			
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.			
54) C215	2-Hexanone	0.00	43	0	N.D.			
55) C235	Chlorobenzene	0.00	112	0	N.D.			
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.			
57) C240	Ethylbenzene	7.28	91	47985	1.92	ug/L		99
58) C246	m,p-Xylene	7.36	106	42380	4.35	ug/L		99
59) C247	o-Xylene	7.69	106	7414	0.81	ug/L		96
60) C245	Styrene	0.00	104	0	N.D.			
61) C180	Bromoform	0.00	173	0	N.D.			
64) C966	Isopropylbenzene	0.00	105	0	N.D.			
65) C301	Bromobenzene	0.00	156	0	N.D.			
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.			
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.			
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.			
69) C302	n-Propylbenzene	8.12	91	140	N.D.			
70) C303	2-Chlorotoluene	0.00	126	0	N.D.			
71) C289	4-Chlorotoluene	0.00	126	0	N.D.			
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.			
73) C306	tert-Butylbenzene	0.00	134	0	N.D.			
74) C307	1,2,4-Trimethylben	8.75	105	544	N.D.			
75) C308	sec-Butylbenzene	8.75	105	544	N.D.			
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.			
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.			
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.			
79) C249	1,2-Dichlorobenzen	9.38	146	169	N.D.			
80) C310	n-Butylbenzene	0.00	91	0	N.D.			
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.			
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.			
83) C316	Hexachlorobutadien	0.00	225	0	N.D.			
84) C314	Naphthalene	0.00	128	0	N.D.			
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.			

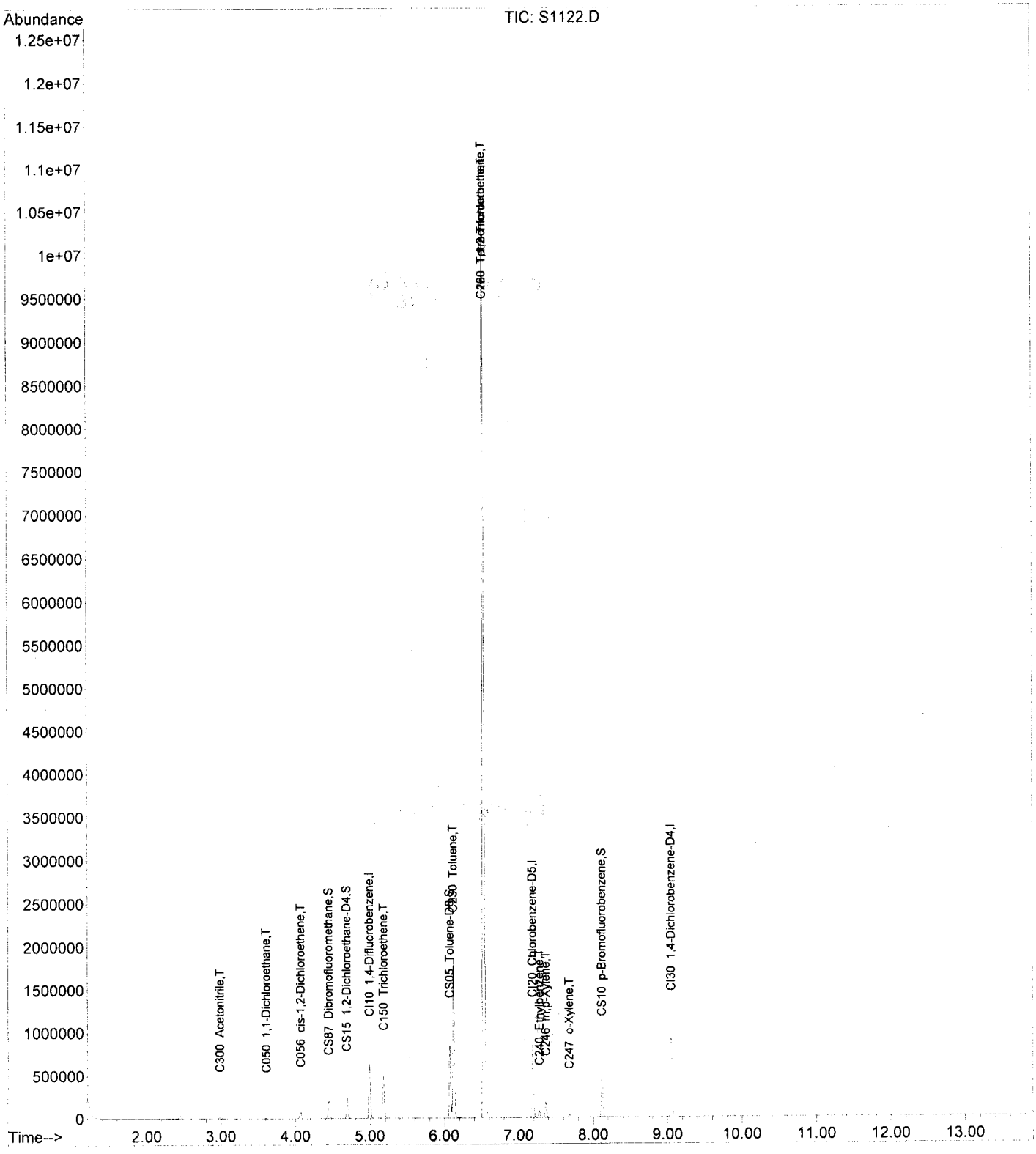
(#) = qualifier out of range (m) = manual integration (+) = signals summed

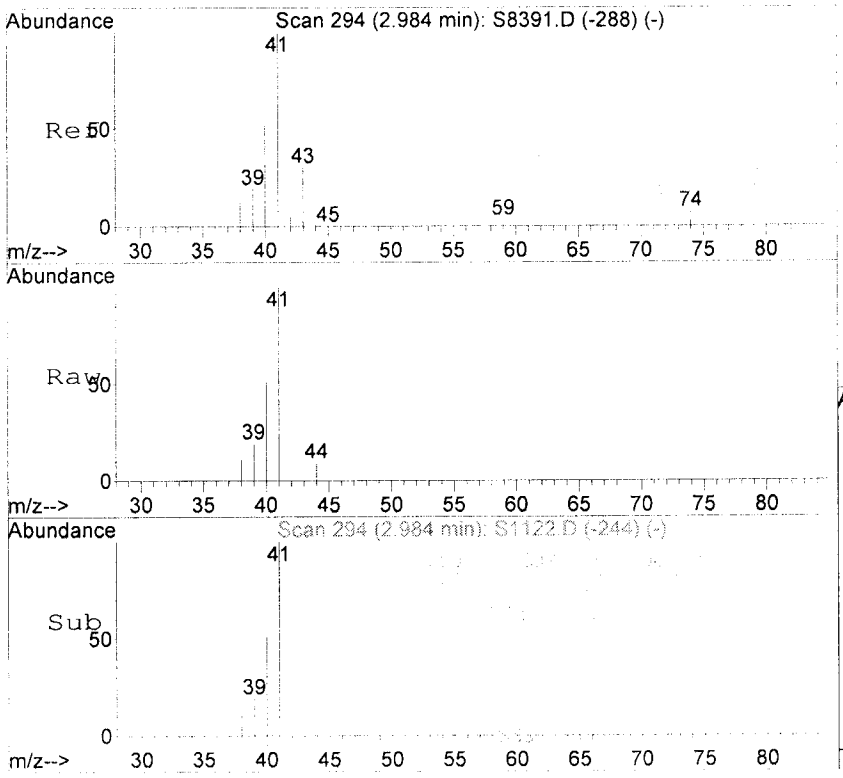
11/26/10

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1122.D Vial: 25
Acq On : 24 Nov 2009 19:32 Operator: DHC
Sample : RSK0991-05 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 25 09:33:49 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA

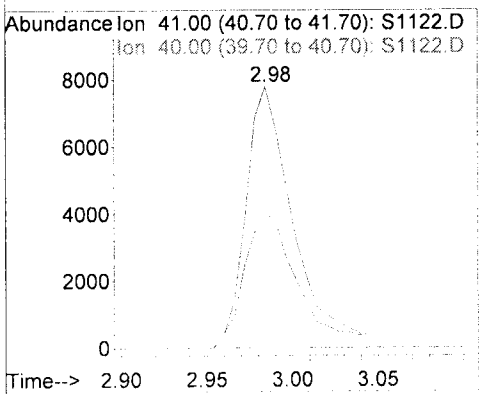


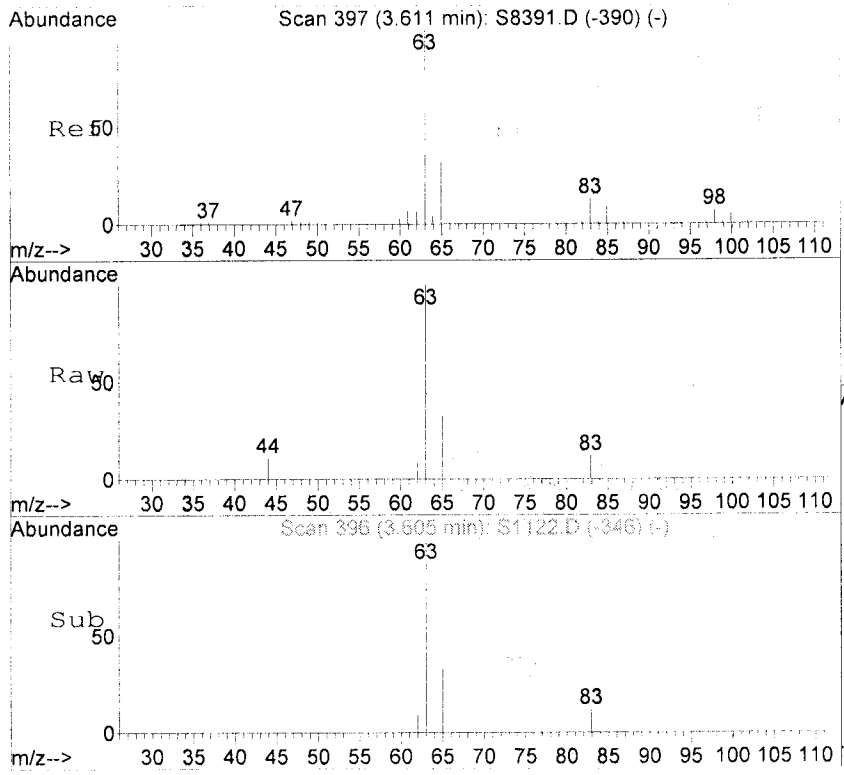


#14
C300 Acetonitrile
Concen: 20.96 ug/L
RT: 2.98 min Scan# 294
Delta R.T. 0.01 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion: 41 Resp: 14856

Ion	Ratio	Lower	Upper
41	100		
40	59.3	33.3	73.3

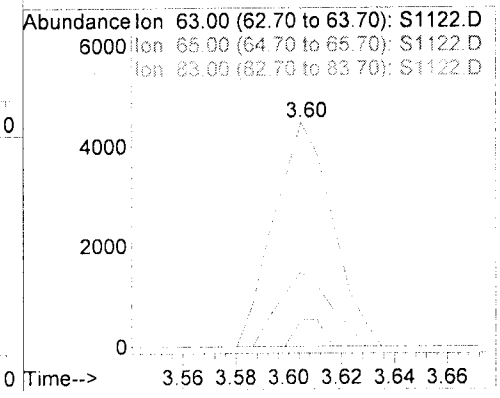


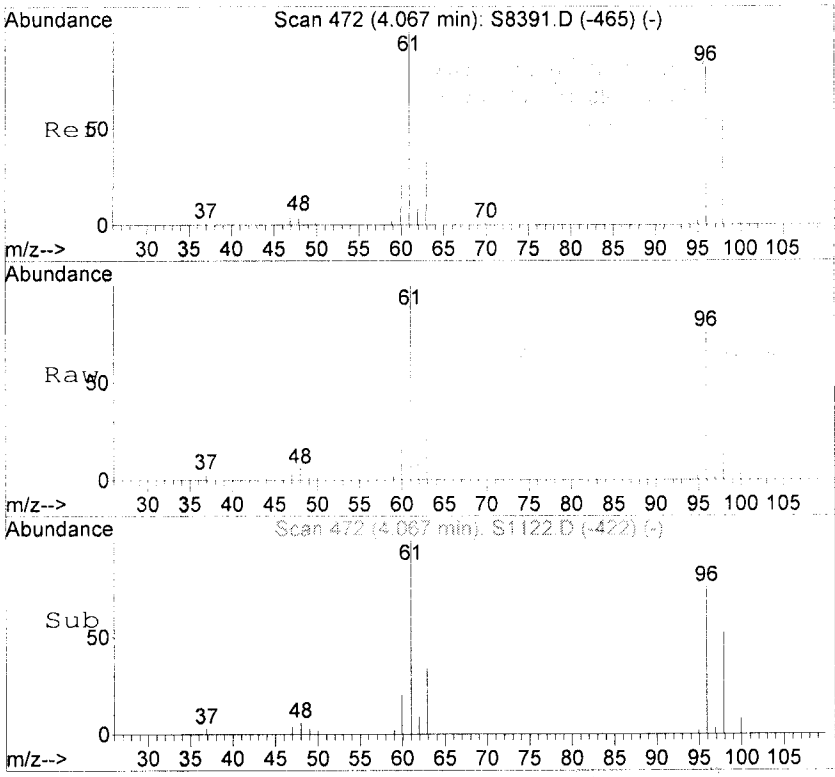


#20
C050 1,1-Dichloroethane
Concen: 0.80 ug/L
RT: 3.60 min Scan# 396
Delta R.T. 0.01 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion: 63 Resp: 6863

Ion	Ratio	Lower	Upper
63	100		
65	33.2	1.5	61.5
83	11.8	0.0	43.0

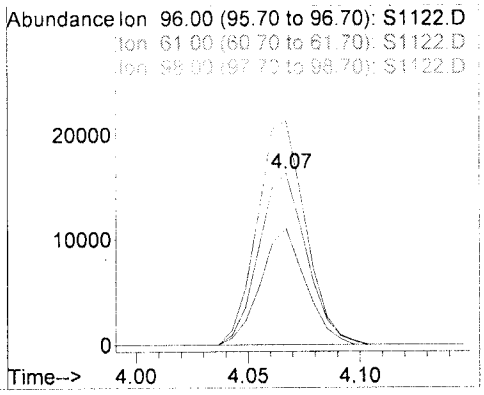


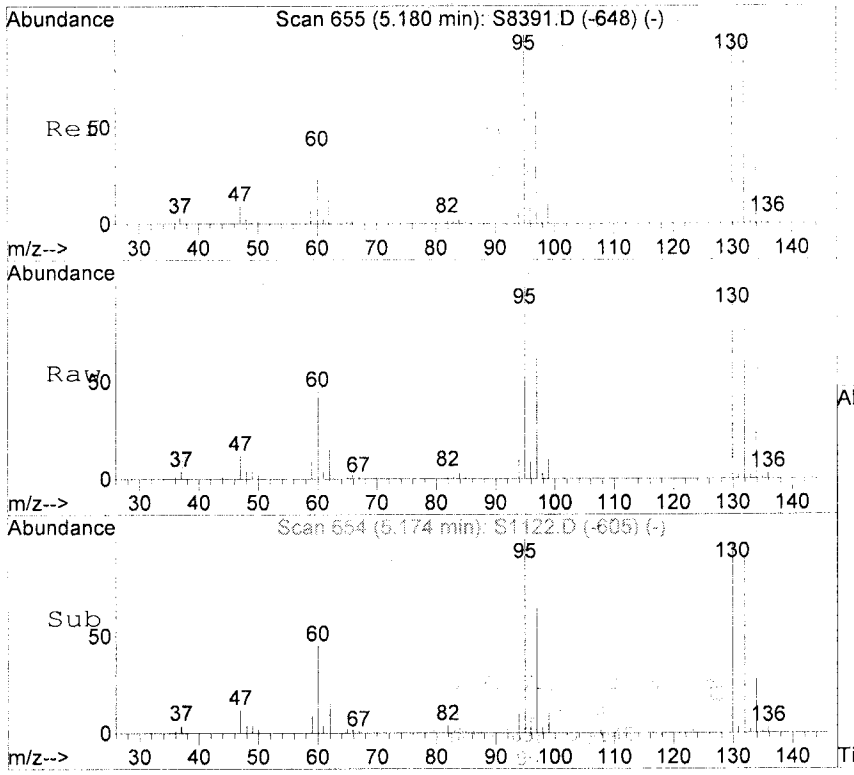


#23
C056 cis-1,2-Dichloroethene
Concen: 4.69 ug/L
RT: 4.07 min Scan# 472
Delta R.T. 0.01 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion: 96 Resp: 24141

Ion	Ratio	Lower	Upper
96	100		
61	130.7	99.9	159.9
98	67.6	31.8	91.8

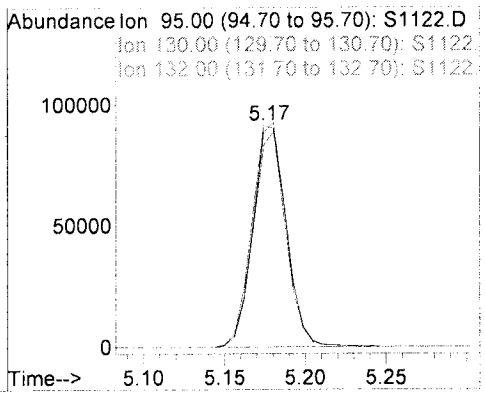


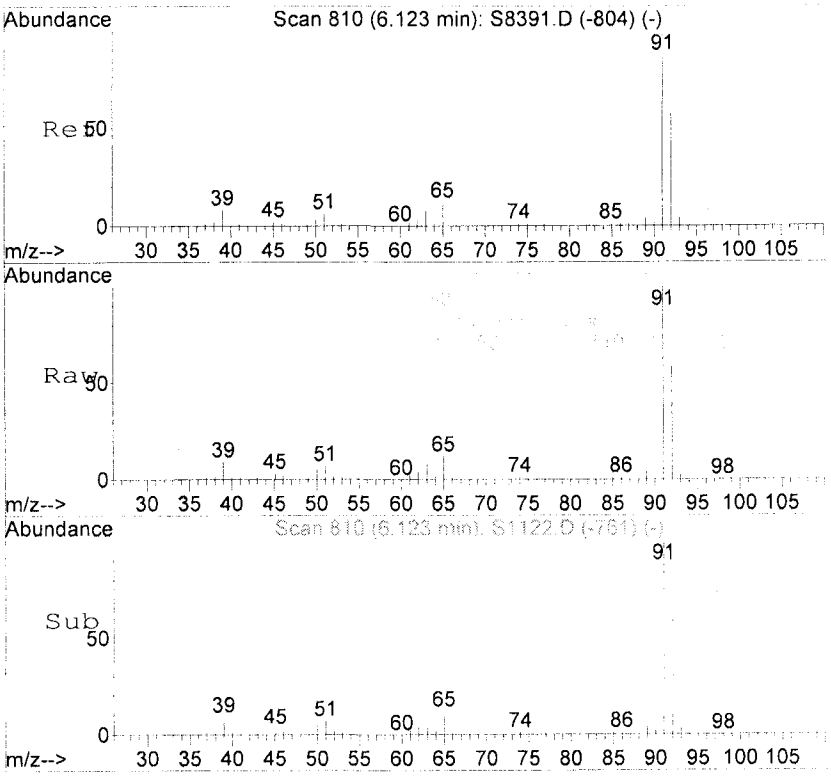


#36
C150 Trichloroethene
Concen: 26.86 ug/L
RT: 5.17 min Scan# 654
Delta R.T. -0.00 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion: 95 Resp: 132167

Ion	Ratio	Lower	Upper
95	100		
130	96.7	77.6	137.6
132	91.0	72.8	132.8

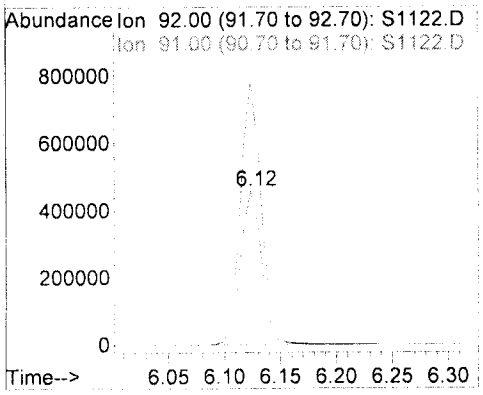


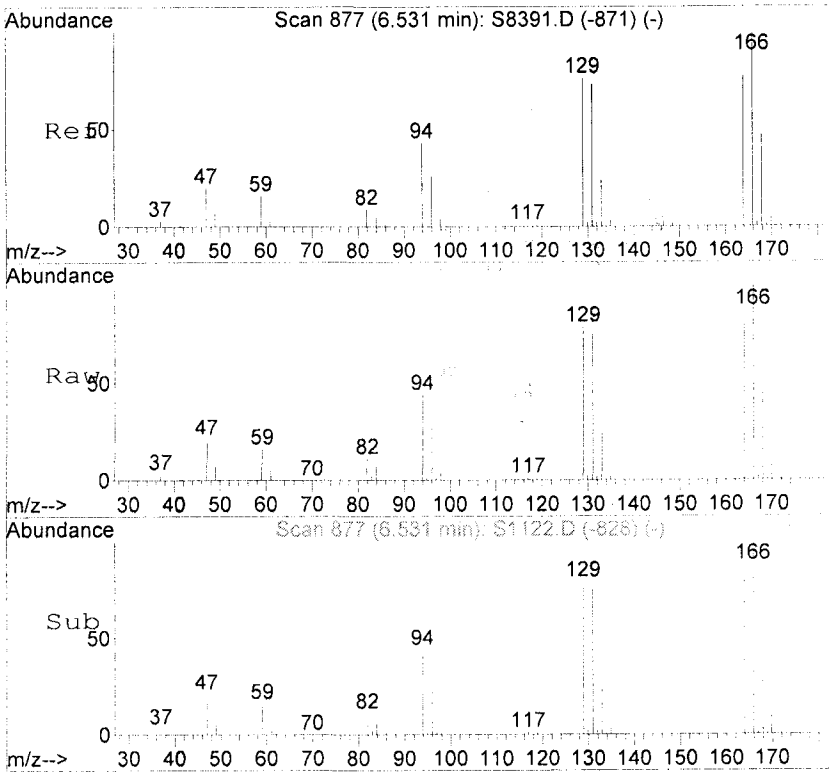


#45
C230 Toluene
Concen: 45.68 ug/L
RT: 6.12 min Scan# 810
Delta R.T. -0.00 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion: 92 Resp: 609431

Ion	Ratio	Lower	Upper
92	100		
91	169.2	131.1	191.1

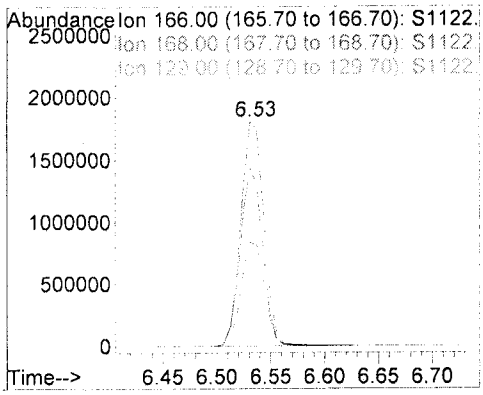


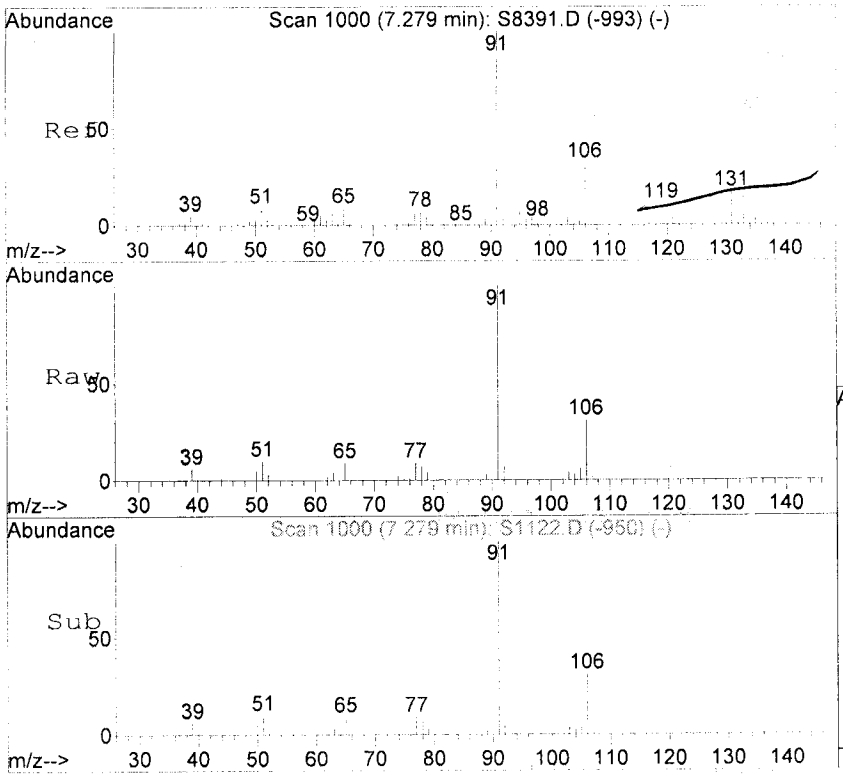


#50
C220 Tetrachloroethene
Concen: 495.63 ug/L
RT: 6.53 min Scan# 877
Delta R.T. -0.00 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion:166 Resp: 2707108

Ion	Ratio	Lower	Upper
166	100		
168	46.3	18.6	78.6
129	79.3	39.3	99.3

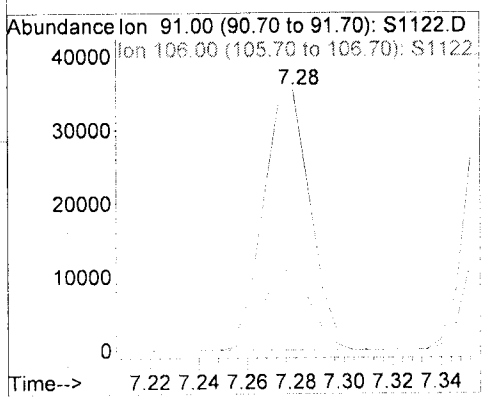


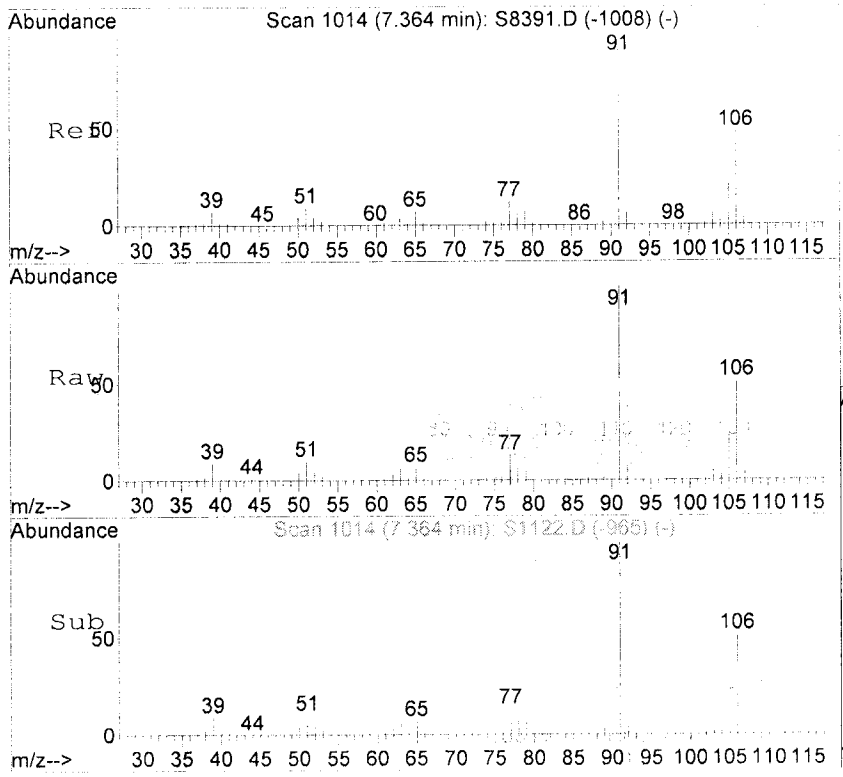


#57
C240 Ethylbenzene
Concen: 1.92 ug/L
RT: 7.28 min Scan# 1000
Delta R.T. 0.01 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion: 91 Resp: 47985

Ion	Ratio	Lower	Upper
91	100		
106	30.9	1.6	61.6

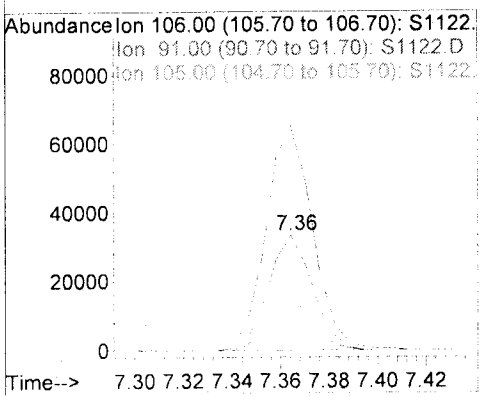


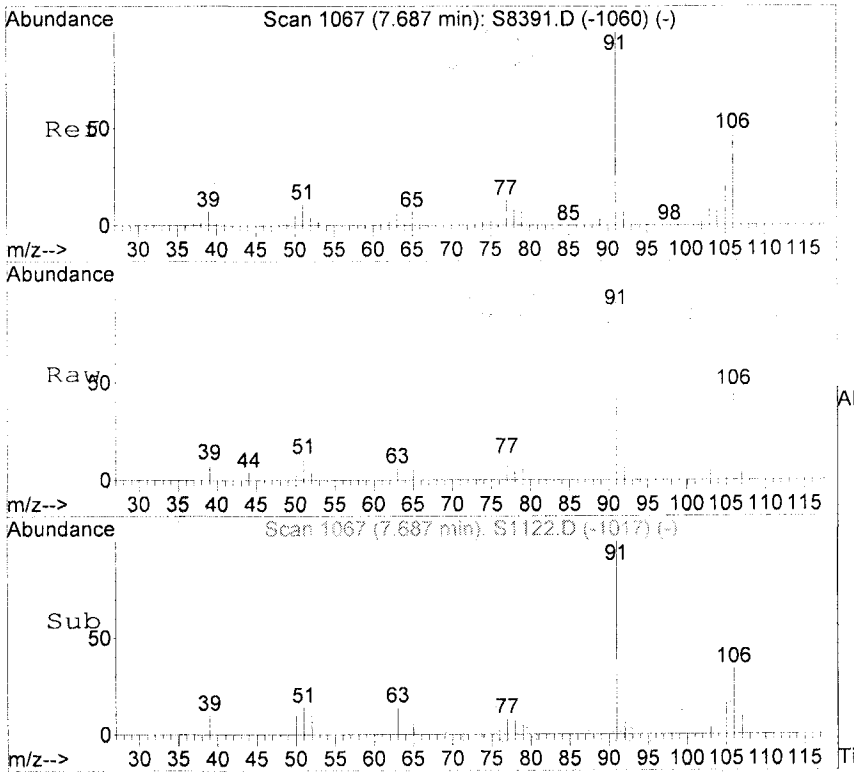


#58
C246 m,p-Xylene
Concen: 4.35 ug/L
RT: 7.36 min Scan# 1014
Delta R.T. -0.00 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion:106 Resp: 42380

Ion	Ratio	Lower	Upper
106	100		
91	195.8	167.2	227.2
105	45.0	15.1	75.1

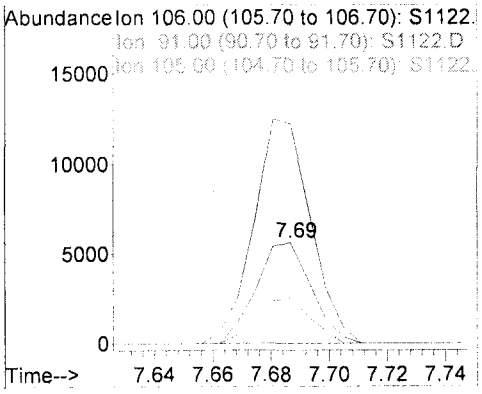




#59
C247 o-Xylene
Concen: 0.81 ug/L
RT: 7.69 min Scan# 1067
Delta R.T. 0.01 min
Lab File: S1122.D
Acq: 24 Nov 2009 19:32

Tgt Ion:106 Resp: 7414

Ion	Ratio	Lower	Upper
106	100		
91	216.9	179.4	239.4
105	45.2	15.7	75.7



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-6

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-05RE1 File ID: S1136.D

Sampled: 11/18/09 11:15 Prepared: 11/24/09 08:00 Analyzed: 11/25/09 13:07

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	10	10	UD
79-34-5	1,1,2,2-Tetrachloroethane	10	10	UD
79-00-5	1,1,2-Trichloroethane	10	10	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	10	10	UD
75-34-3	1,1-Dichloroethane	10	10	UD
75-35-4	1,1-Dichloroethene	10	10	UD
120-82-1	1,2,4-Trichlorobenzene	10	10	UD
96-12-8	1,2-Dibromo-3-chloropropane	10	10	UD
106-93-4	1,2-Dibromoethane (EDB)	10	10	UD
95-50-1	1,2-Dichlorobenzene	10	10	UD
107-06-2	1,2-Dichloroethane	10	10	UD
540-59-0	1,2-Dichloroethene, Total	10	20	UD
78-87-5	1,2-Dichloropropane	10	10	UD
541-73-1	1,3-Dichlorobenzene	10	10	UD
106-46-7	1,4-Dichlorobenzene	10	10	UD
78-93-3	2-Butanone (MEK)	10	50	UD
591-78-6	2-Hexanone	10	50	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	10	50	UD
67-64-1	Acetone	10	50	UD
71-43-2	Benzene	10	10	UD
75-27-4	Bromodichloromethane	10	10	UD
75-25-2	Bromoform	10	10	UD
74-83-9	Bromomethane	10	10	UD
75-15-0	Carbon disulfide	10	10	UD
56-23-5	Carbon Tetrachloride	10	10	UD
108-90-7	Chlorobenzene	10	10	UD
124-48-1	Chlorodibromomethane	10	10	UD
75-00-3	Chloroethane	10	10	UD
67-66-3	Chloroform	10	10	UD
74-87-3	Chloromethane	10	10	UD
156-59-2	cis-1,2-Dichloroethene	10	5.9	JD
10061-01-5	cis-1,3-Dichloropropene	10	10	UD
110-82-7	Cyclohexane	10	10	UD
75-71-8	Dichlorodifluoromethane	10	10	UD
100-41-4	Ethylbenzene	10	10	UD
98-82-8	Isopropylbenzene	10	10	UD
79-20-9	Methyl Acetate	10	10	UD
1634-04-4	Methyl tert-Butyl Ether	10	10	UD
108-87-2	Methylcyclohexane	10	10	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-6

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	RSK0991-05RE1	File ID:	S1136.D
Sampled:	11/18/09 11:15	Prepared:	11/24/09 08:00	Analyzed:	11/25/09 13:07
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9K25014	Sequence:	RK92506	Calibration:	R9K2009
Instrument:	HP5973S				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	10	10	UD
100-42-5	Styrene	10	10	UD
127-18-4	Tetrachloroethene	10	620	D
108-88-3	Toluene	10	44	D
156-60-5	trans-1,2-Dichloroethene	10	10	UD
10061-02-6	trans-1,3-Dichloropropene	10	10	UD
79-01-6	Trichloroethene	10	28	D
75-69-4	Trichlorofluoromethane	10	10	UD
108-05-4	Vinyl acetate	10	50	UD
75-01-4	Vinyl chloride	10	10	UD
1330-20-7	Xylenes, total	10	20	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.3	97	66 - 137	D
4-Bromofluorobenzene	25.0	24.4	98	73 - 120	D
Toluene-d8	25.0	23.9	96	71 - 126	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	186894	9.06	219341	9.06	
1,4-Difluorobenzene	375928	4.99	394951	4.99	
Chlorobenzene-d5	205386	7.19	219500	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1136.D Vial: 10
Acq On : 25 Nov 2009 13:07 Operator: DHC
Sample : RSK0991-05RE1@10X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:44 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	375928	25.00 ug/L	0.00 95.18%
43) CI20	Chlorobenzene-D5	7.19	82	205386	25.00 ug/L	0.00 93.57%
63) CI30	1,4-Dichlorobenzene-	9.06	152	186894	25.00 ug/L	0.00 85.21%
System Monitoring Compounds						
26) CS87	Dibromofluoromethane	4.44	111	99200	24.40 ug/L	0.00
Spiked Amount	25.000	Range 70 - 130		Recovery =	97.60%	
31) CS15	1,2-Dichloroethane-D	4.69	65	129907	24.34 ug/L	0.00
Spiked Amount	25.000	Range 66 - 137		Recovery =	97.36%	
44) CS05	Toluene-D8	6.07	98	433996	23.89 ug/L	0.00
Spiked Amount	25.000	Range 71 - 126		Recovery =	95.56%	
62) CS10	p-Bromofluorobenzene	8.12	174	134079	24.38 ug/L	0.00
Spiked Amount	25.000	Range 73 - 120		Recovery =	97.52%	
Target Compounds						Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.	
3) C010	Chloromethane	0.00	50	0	N.D.	
4) C020	Vinyl chloride	0.00	62	0	N.D.	
5) C015	Bromomethane	0.00	94	0	N.D.	
6) C025	Chloroethane	0.00	64	0	N.D.	
7) C275	Trichlorofluoromet	0.00	101	0	N.D.	
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030	Methylene chloride	3.05	84	149	N.D.	
10) C040	Carbon disulfide	2.77	76	776	N.D.	
11) C036	Acrolein	0.00	56	0	N.D.	
12) C038	Acrylonitrile	0.00	53	0	N.D.	
13) C035	Acetone	2.73	43	292	N.D.	
14) C300	Acetonitrile	2.99	41	1330	N.D.	
15) C276	Iodomethane	0.00	142	0	N.D.	
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.	
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.	
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255	Methyl Acetate	0.00	43	0	N.D.	
20) C050	1,1-Dichloroethane	3.60	63	496	N.D.	
21) C125	Vinyl Acetate	0.00	43	0	N.D.	
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056	cis-1,2-Dichloroethe	4.07	96	2951	0.59 ug/L	97
24) C272	Tetrahydrofuran	4.33	42	291	N.D.	
25) C222	Bromochloromethane	0.00	128	0	N.D.	
27) C060	Chloroform	0.00	83	0	N.D.	
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120	Carbon tetrachlori	0.00	117	0	N.D.	
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165	Benzene	0.00	78	0	N.D.	
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110	2-Butanone	0.00	43	0	N.D.	
35) C256	Cyclohexane	0.00	56	0	N.D.	
36) C150	Trichloroethene	5.18	95	13320	2.81 ug/L	98
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278	Dibromomethane	0.00	93	0	N.D.	

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1136.D Vial: 10
Acq On : 25 Nov 2009 13:07 Operator: DHC
Sample : RSK0991-05RE1@10X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:44 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	56533	4.44 ug/L	93
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroethan	6.53	83	5616	1.74 ug/L #	29
49) C210	4-Methyl-2-pentano	6.07	43	1718	N.D.	
50) C220	Tetrachloroethene	6.53	166	321587	61.72 ug/L	97
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.28	91	4627	N.D.	
58) C246	m,p-Xylene	7.36	106	4041	N.D.	
59) C247	o-Xylene	7.69	106	690	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.12	91	147	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	8.99	146	135	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	9.07	146	444	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	0.00	128	0	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

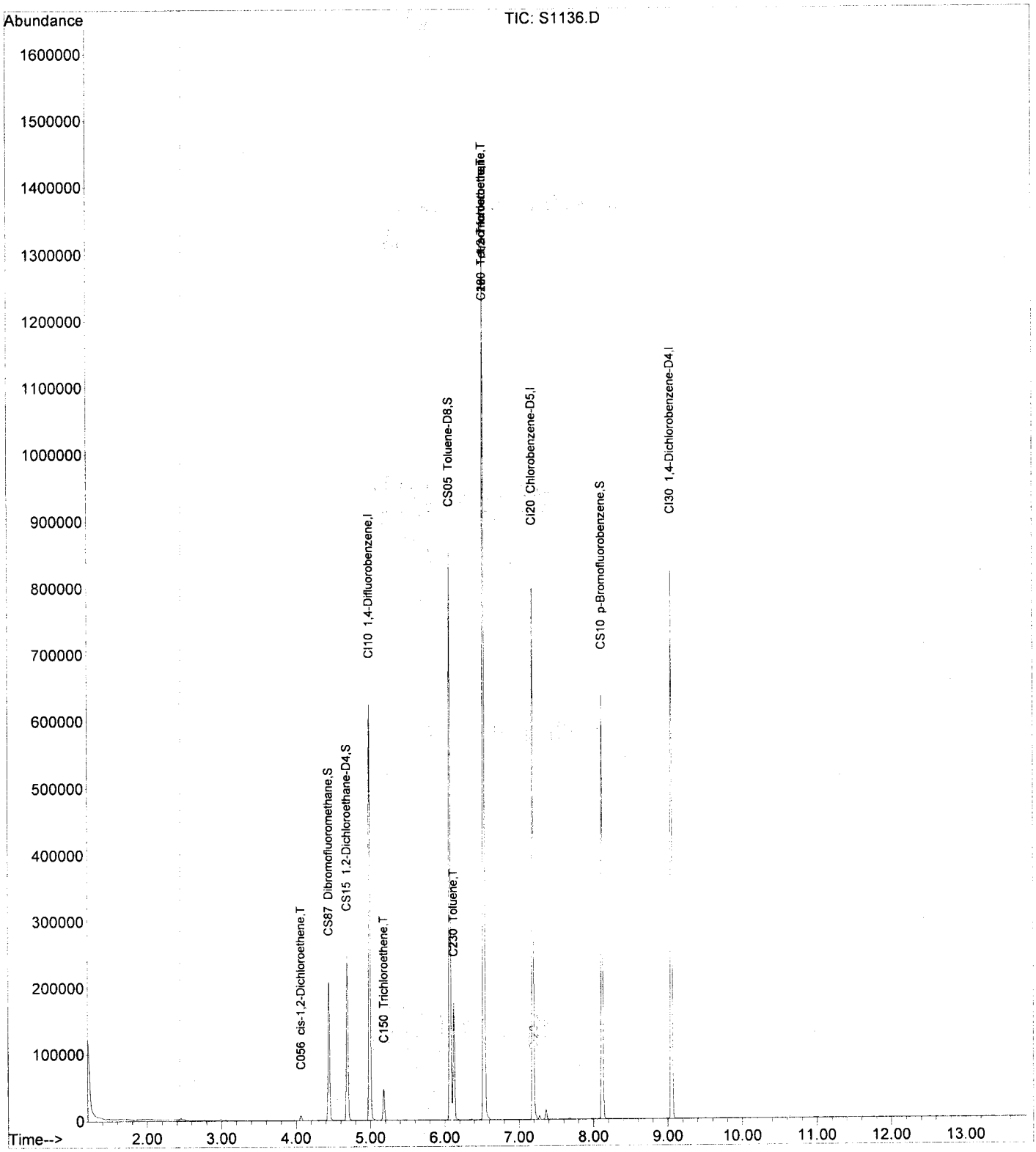
11/12/10

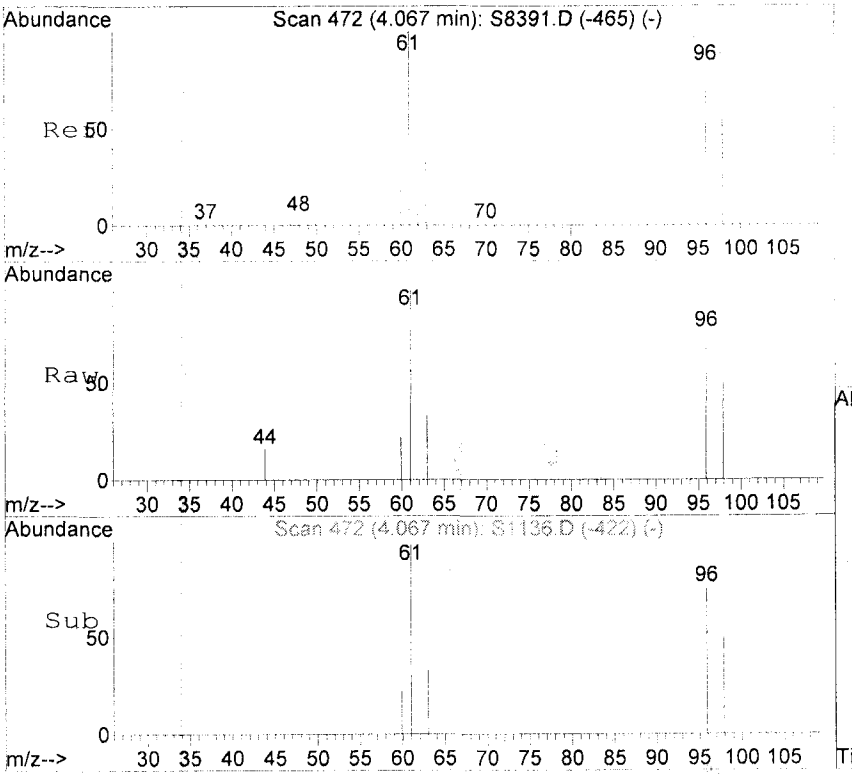
Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1136.D
Acq On : 25 Nov 2009 13:07
Sample : RSK0991-05RE1@10X
Misc :
MS Integration Params: RTEINT.P

Vial: 10
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 15:10:44 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA

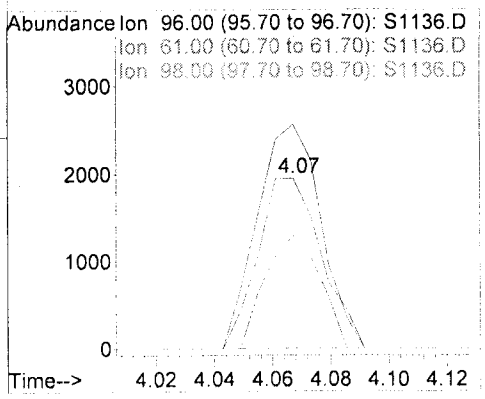


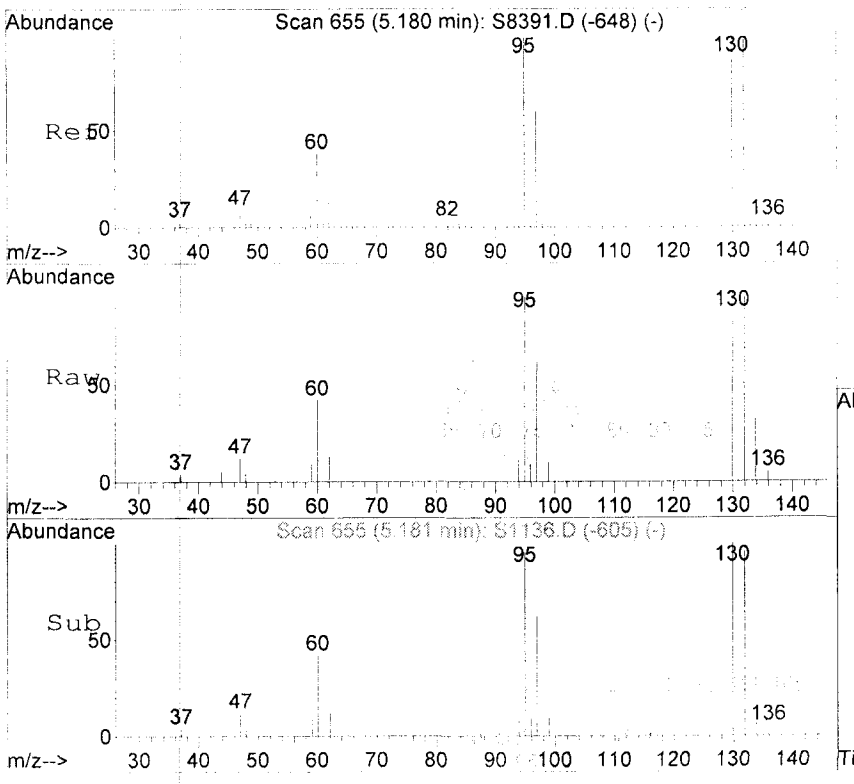


#23
C056 cis-1,2-Dichloroethene
Concen: 0.59 ug/L
RT: 4.07 min Scan# 472
Delta R.T. 0.01 min
Lab File: S1136.D
Acq: 25 Nov 2009 13:07

Tgt Ion: 96 Resp: 2951

Ion	Ratio	Lower	Upper
96	100		
61	131.4	99.9	159.9
98	66.2	31.8	91.8

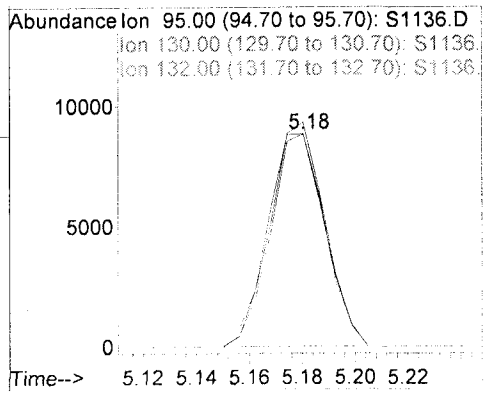


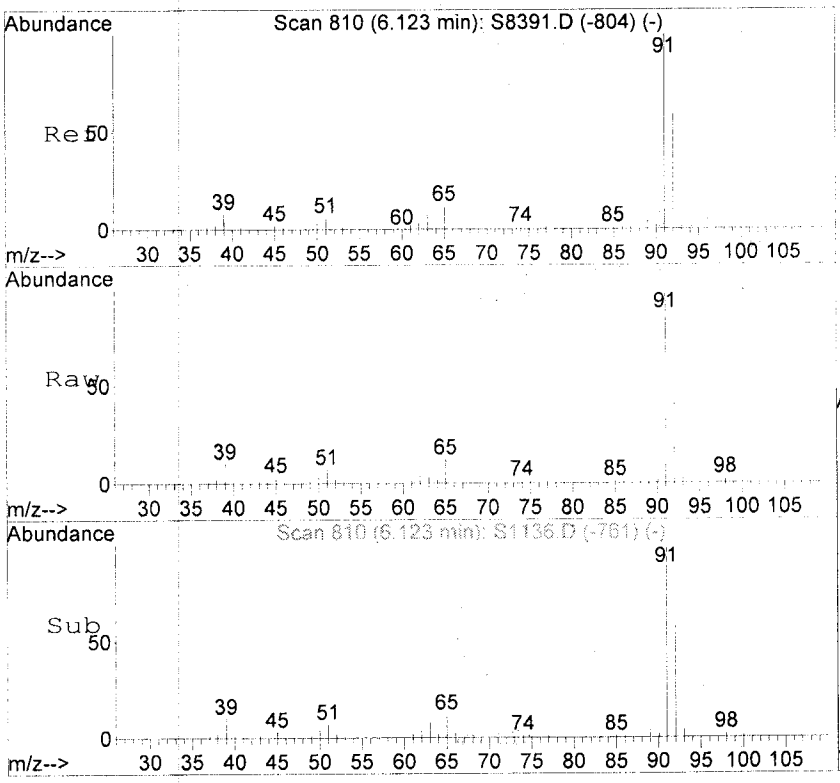


#36
C150 Trichloroethene
Concen: 2.81 ug/L
RT: 5.18 min Scan# 655
Delta R.T. 0.01 min
Lab File: S1136.D
Acq: 25 Nov 2009 13:07

Tgt Ion: 95 Resp: 13320

Ion	Ratio	Lower	Upper
95	100		
130	105.4	77.6	137.6
132	100.0	72.8	132.8

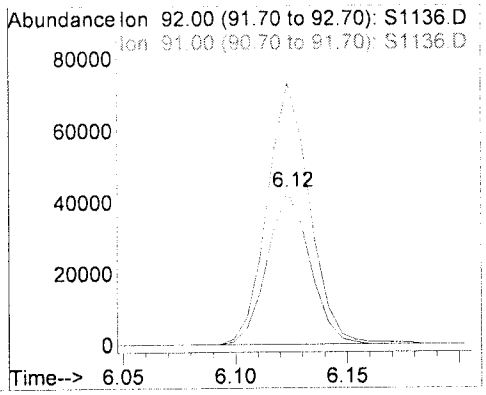


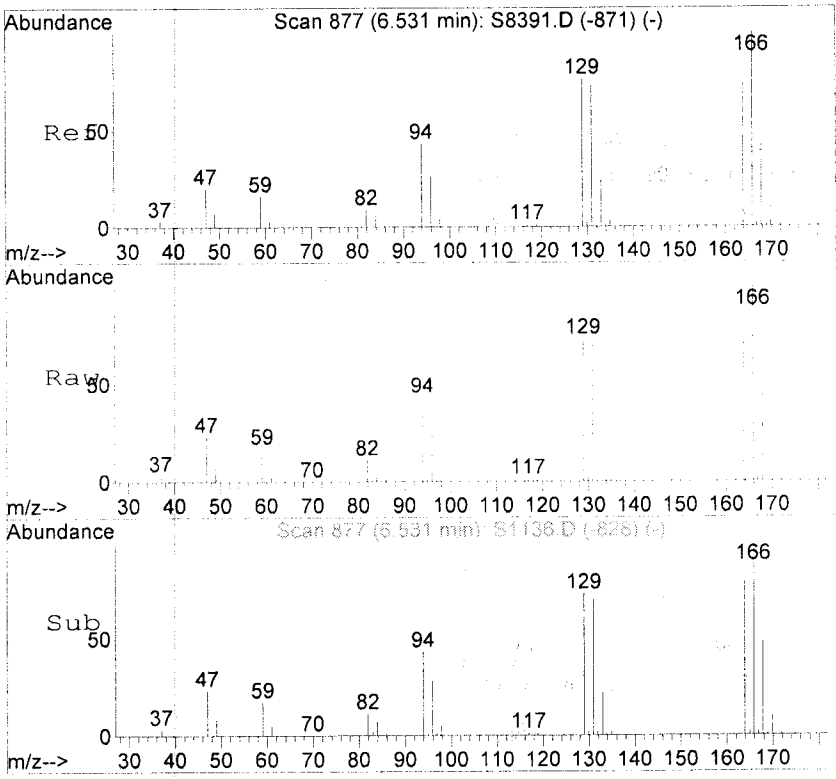


#45
C230 Toluene
Concen: 4.44 ug/L
RT: 6.12 min Scan# 810
Delta R.T. 0.00 min
Lab File: S1136.D
Acq: 25 Nov 2009 13:07

Tgt Ion: 92 Resp: 56533

Ion	Ratio	Lower	Upper
92	100		
91	171.0	131.1	191.1

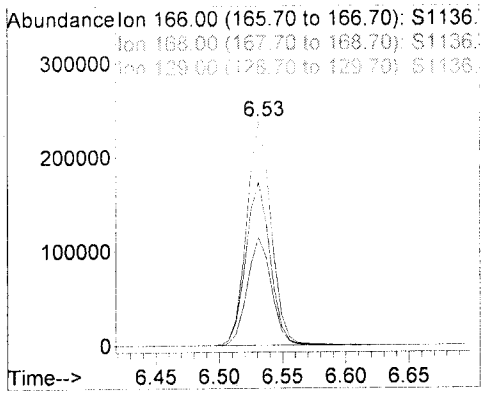




#50
C220 Tetrachloroethene
Concen: 61.72 ug/L
RT: 6.53 min Scan# 877
Delta R.T. 0.00 min
Lab File: S1136.D
Acq: 25 Nov 2009 13:07

Tgt Ion:166 Resp: 321587

Ion	Ratio	Lower	Upper
166	100		
168	48.1	18.6	78.6
129	72.8	39.3	99.3



Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

GW-5

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-06 File ID: S1123.D

Sampled: 11/19/09 11:25 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 19:56

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	3.5	
75-34-3	1,1-Dichloroethane	1	440	E
75-35-4	1,1-Dichloroethene	1	2.2	
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	100	
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	6.1	
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	120	E
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	100	
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-5

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-06 File ID: S1123.D

Sampled: 11/19/09 11:25 Prepared: 11/24/09 08:00 Analyzed: 11/24/09 19:56

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.5	
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	47	
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	22	
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.3	97	66 - 137	
4-Bromofluorobenzene	25.0	24.2	97	73 - 120	
Toluene-d8	25.0	23.8	95	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	195524	9.05	221647	9.05	
1,4-Difluorobenzene	381232	4.99	401345	4.99	
Chlorobenzene-d5	207122	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1123.D Vial: 26
Acq On : 24 Nov 2009 19:56 Operator: DHC
Sample : RSK0991-06 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:54 2009 Results File: R9K2009-SIXPT.RES

RE1 @8X

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	4.99	114	381232	25.00 ug/L	0.00 94.99%
43) CI20 Chlorobenzene-D5	7.19	82	207122	25.00 ug/L	0.00 93.29%
63) CI30 1,4-Dichlorobenzene-	9.05	152	195524	25.00 ug/L	0.00 88.21%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.44	111	102980	24.98 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.92%		
31) CS15 1,2-Dichloroethane-D	4.69	65	131649	24.32 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery = 97.28%		
44) CS05 Toluene-D8	6.07	98	436762	23.84 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery = 95.36%		
62) CS10 p-Bromofluorobenzene	8.12	174	134229	24.20 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery = 96.80%		
Target Compounds					Qvalue
2) C290 Dichlorodifluorometh	1.26	85	3124	0.62 ug/L #	100
3) C010 Chloromethane	0.00	50	0	N.D.	
4) C020 Vinyl chloride	1.53	62	130839	21.96 ug/L	88
5) C015 Bromomethane	0.00	94	0	N.D.	
6) C025 Chloroethane	1.90	64	103993	124.52 ug/L	88
7) C275 Trichlorofluoromet	0.00	101	0	N.D.	
8) C045 1,1-Dichloroethene	2.59	96	8880	2.21 ug/L	93
9) C030 Methylene chloride	3.05	84	2063	N.D.	
10) C040 Carbon disulfide	2.77	76	2099	N.D.	
11) C036 Acrolein	0.00	56	0	N.D.	
12) C038 Acrylonitrile	0.00	53	0	N.D.	
13) C035 Acetone	2.72	43	8045	6.12 ug/L	94
14) C300 Acetonitrile	0.00	41	0	N.D.	
15) C276 Iodomethane	0.00	142	0	N.D.	
16) C291 1,1,2-Trichloro-1,2,	2.58	101	14631	3.52 ug/L	93
17) C962 T-butyl Methyl Eth	3.26	73	3184	N.D.	
18) C057 trans-1,2-Dichloro	3.25	96	1522	N.D.	
19) C255 Methyl Acetate	0.00	43	0	N.D.	
20) C050 1,1-Dichloroethane	3.60	63	3678880	436.86 ug/L	99
21) C125 Vinyl Acetate	3.60	43	1714	N.D.	
22) C051 2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056 cis-1,2-Dichloroethe	4.07	96	501582	99.69 ug/L	99
24) C272 Tetrahydrofuran	0.00	42	0	N.D.	
25) C222 Bromochloromethane	0.00	128	0	N.D.	
27) C060 Chloroform	0.00	83	0	N.D.	
28) C115 1,1,1-Trichloroeth	4.41	97	637	N.D.	
29) C120 Carbon tetrachlori	0.00	117	0	N.D.	
30) C116 1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165 Benzene	4.70	78	2808	N.D.	
33) C065 1,2-Dichloroethane	4.75	62	1551	N.D.	
34) C110 2-Butanone	4.13	43	1970	N.D.	
35) C256 Cyclohexane	0.00	56	0	N.D.	
36) C150 Trichloroethene	5.17	95	227188	47.22 ug/L	90
37) C140 1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278 Dibromomethane	0.00	93	0	N.D.	

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1123.D Vial: 26
Acq On : 24 Nov 2009 19:56 Operator: DHC
Sample : RSK0991-06 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:54 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	5.17	83	2485	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	4493	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1760	N.D.	
50) C220	Tetrachloroethene	6.53	166	7893	1.50 ug/L	96
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	7.21	112	470	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.27	91	2147	N.D.	
58) C246	m,p-Xylene	7.36	106	2144	N.D.	
59) C247	o-Xylene	7.68	106	760	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.12	91	317	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	9.38	146	1593	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	0.00	128	0	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

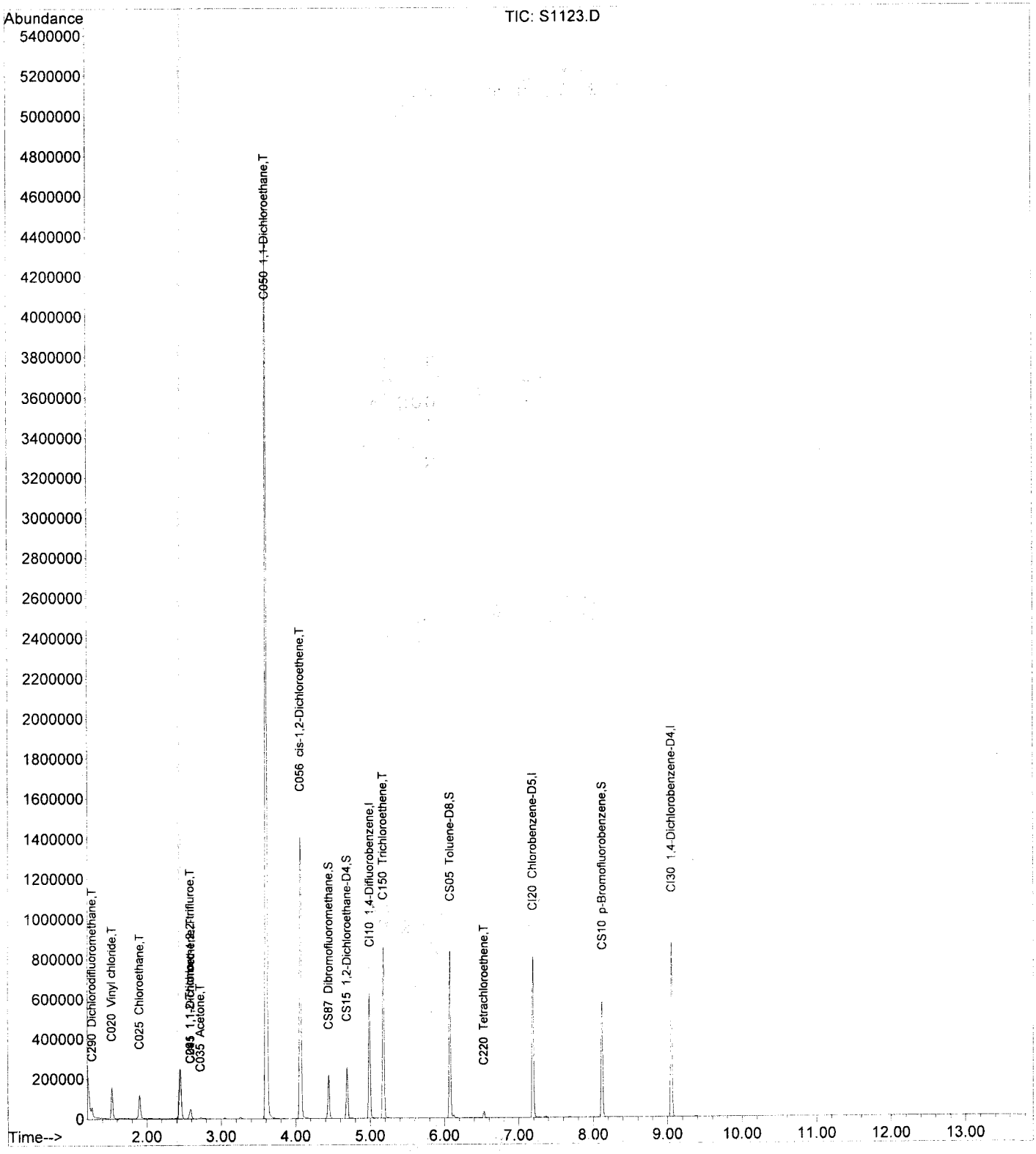
(#) = qualifier out of range (m) = manual integration (+) = signals summed

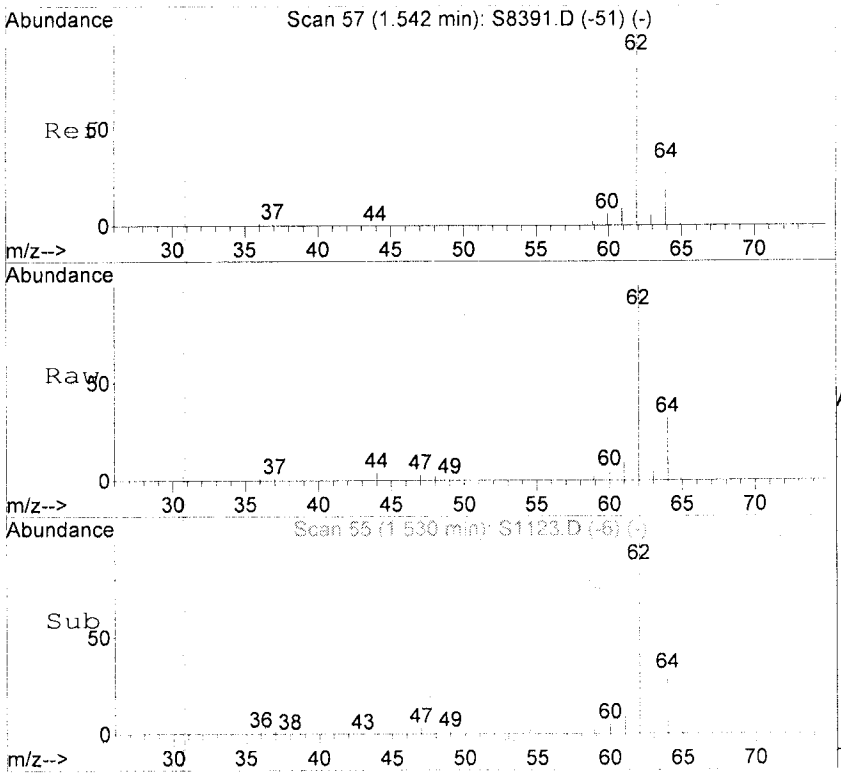
11/25/09

Data File : D:\MSDCHEM\S\DATA\112409\S1123.D
Acq On : 24 Nov 2009 19:56
Sample : RSK0991-06
Misc :
MS Integration Params: RTEINT.P

Vial: 26
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 09:33:54 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA

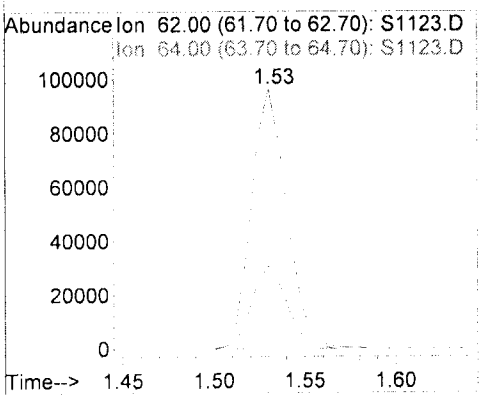


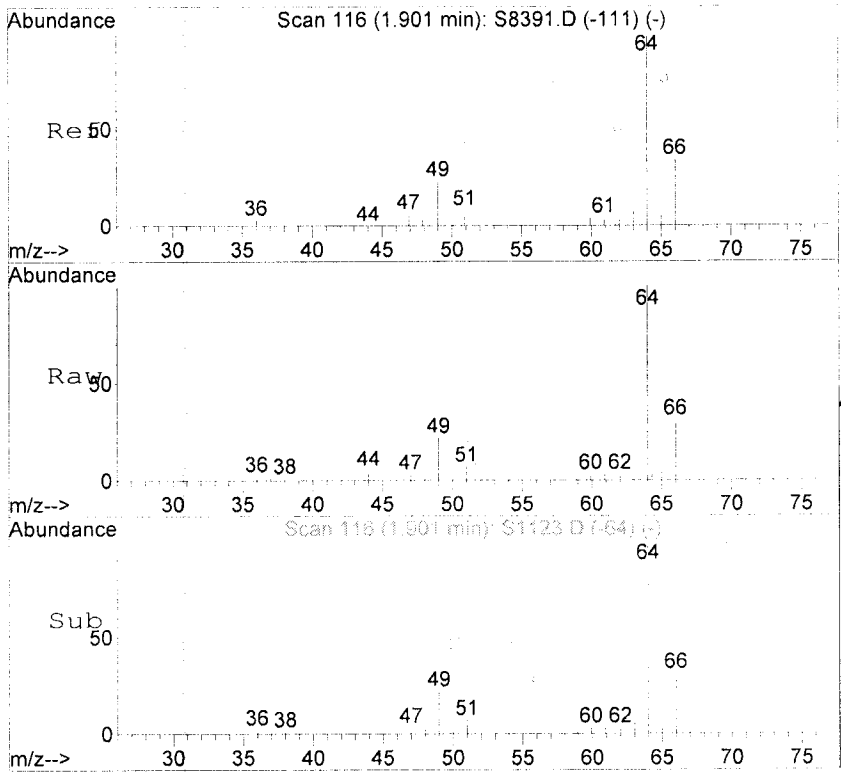


#4
C020 Vinyl chloride
Concen: 21.96 ug/L
RT: 1.53 min Scan# 55
Delta R.T. 0.00 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion: 62 Resp: 130839

Ion	Ratio	Lower	Upper
62	100		
64	31.9	9.4	69.4

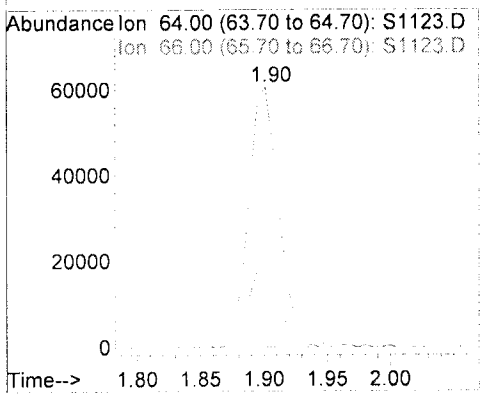


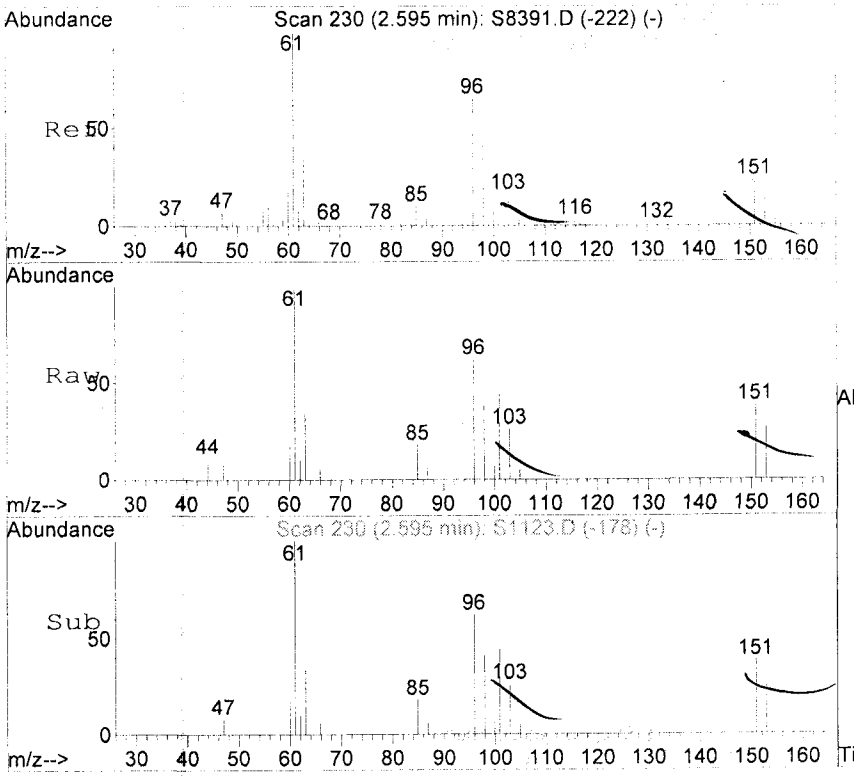


#6
C025 Chloroethane
Concen: 124.52 ug/L
RT: 1.90 min Scan# 116
Delta R.T. 0.02 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion: 64 Resp: 103993

Ion	Ratio	Lower	Upper
64	100		
66	31.0	8.3	68.3

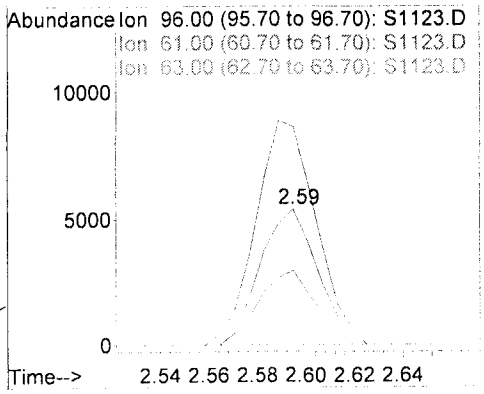


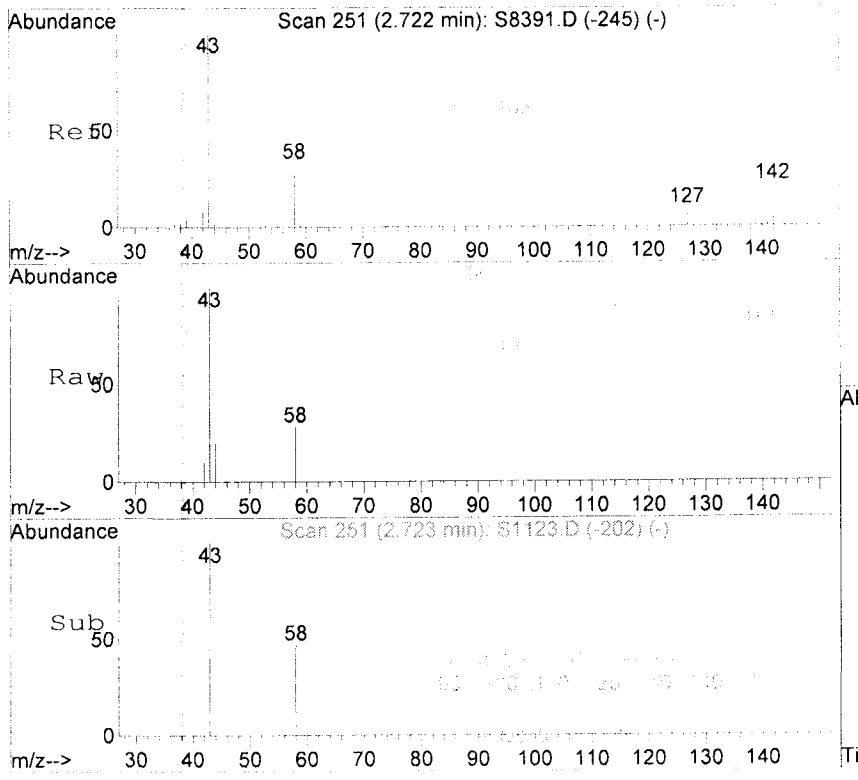


#8
C045 1,1-Dichloroethene
Concen: 2.21 ug/L
RT: 2.59 min Scan# 230
Delta R.T. 0.02 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion: 96 Resp: 8880

Ion	Ratio	Lower	Upper
96	100		
61	160.3	140.6	200.6
63	55.0	21.9	81.9

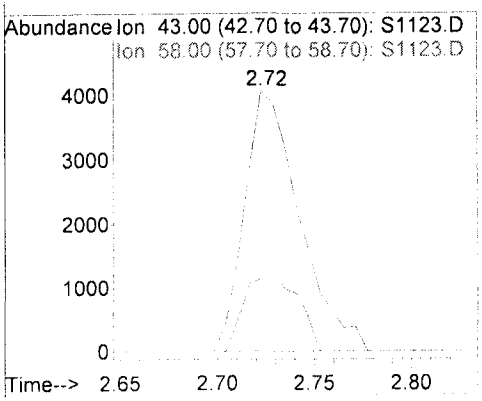


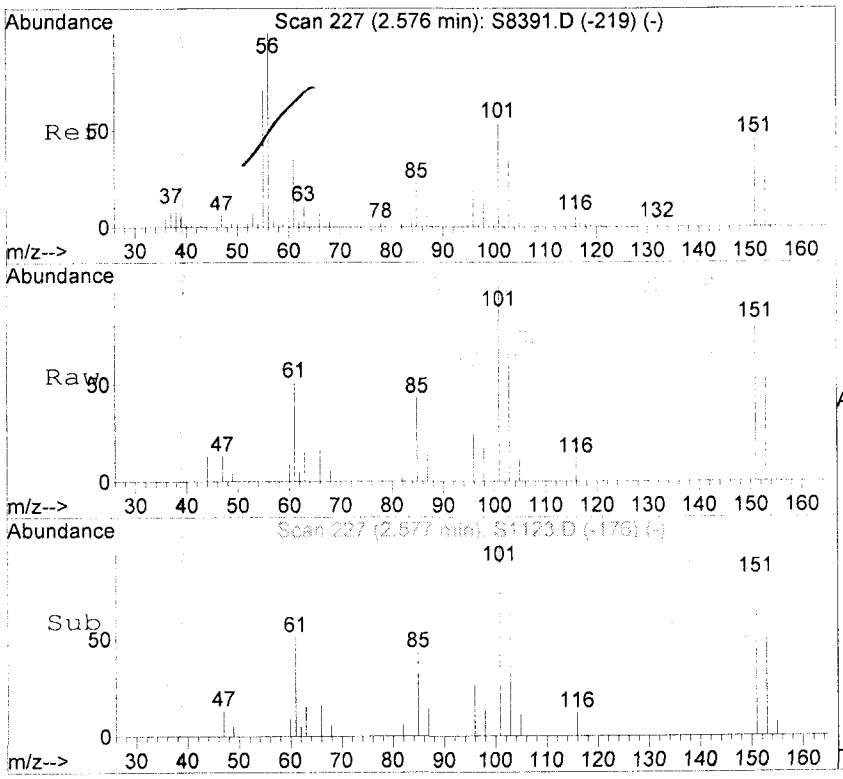


#13
C035 Acetone
Concen: 6.12 ug/L
RT: 2.72 min Scan# 251
Delta R.T. 0.00 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion: 43 Resp: 8045

Ion	Ratio	Lower	Upper
43	100		
58	27.9	1.4	61.4

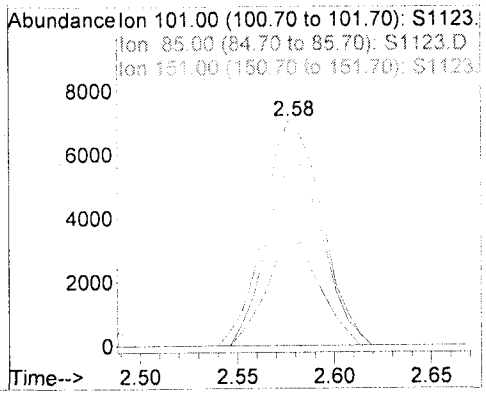


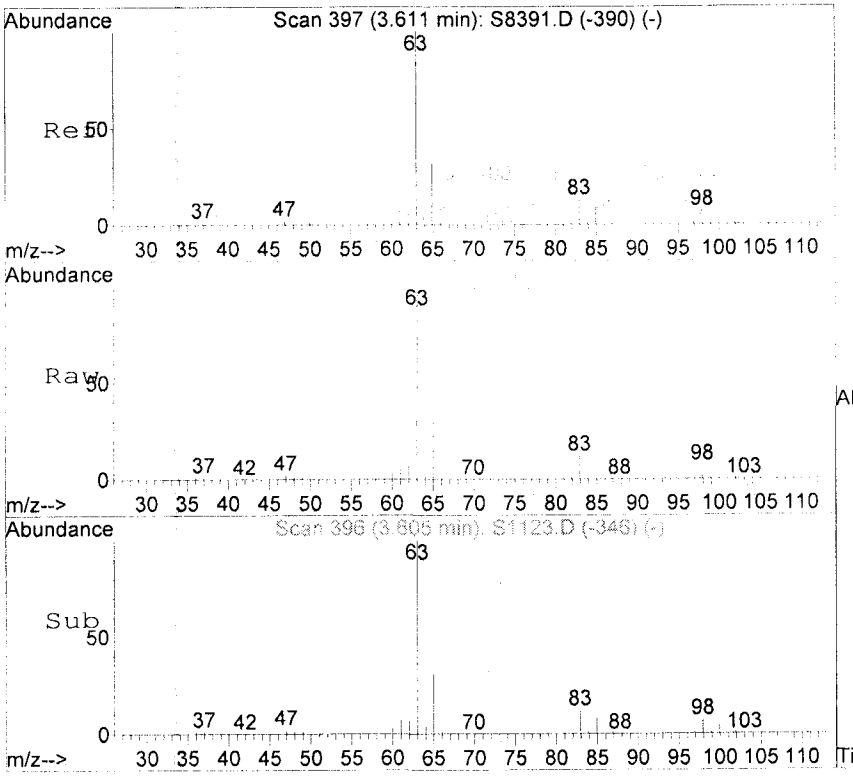


#16
C291 1,1,2-Trichloro-1,2,2-tr:
Concen: 3.52 ug/L
RT: 2.58 min Scan# 227
Delta R.T. 0.01 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion:101 Resp: 14631

Ion	Ratio	Lower	Upper
101	100		
85	42.9	35.0	52.6
151	79.8	70.9	106.3

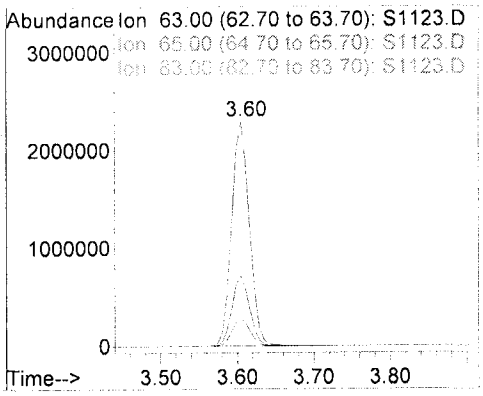


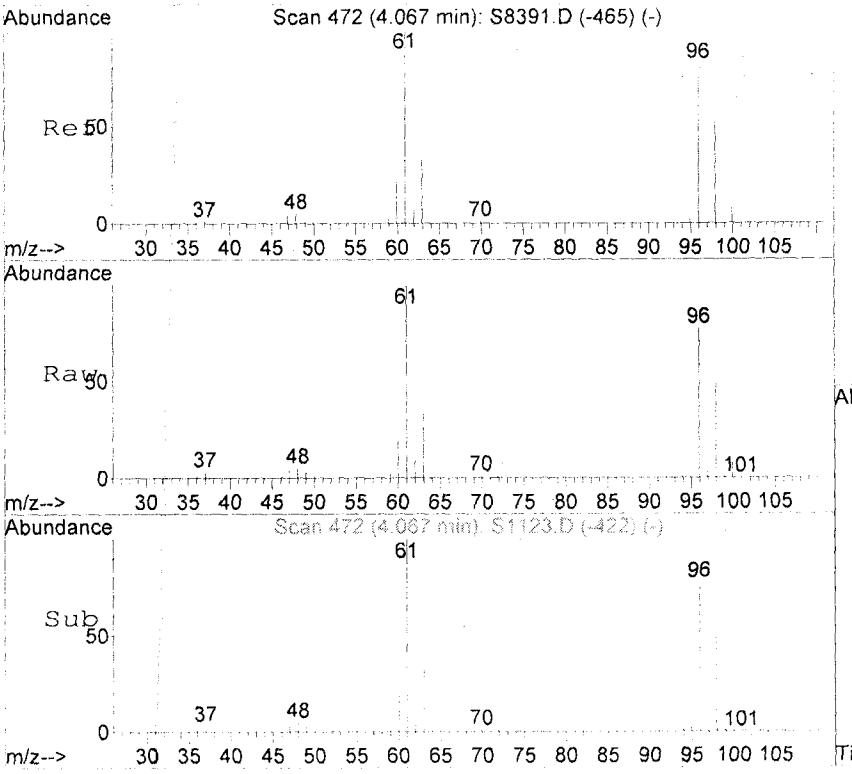


#20
C050 1,1-Dichloroethane
Concen: 436.86 ug/L
RT: 3.60 min Scan# 396
Delta R.T. 0.01 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion: 63 Resp: 3678880

Ion	Ratio	Lower	Upper
63	100		
65	30.9	1.5	61.5
83	12.4	0.0	43.0

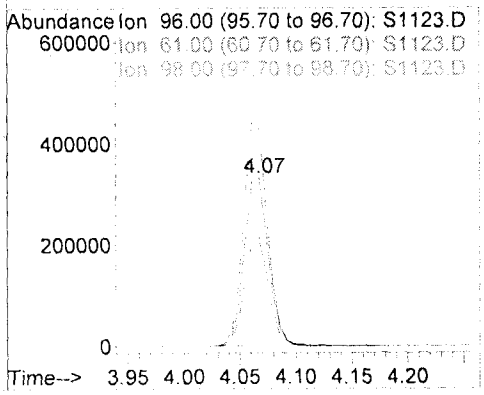


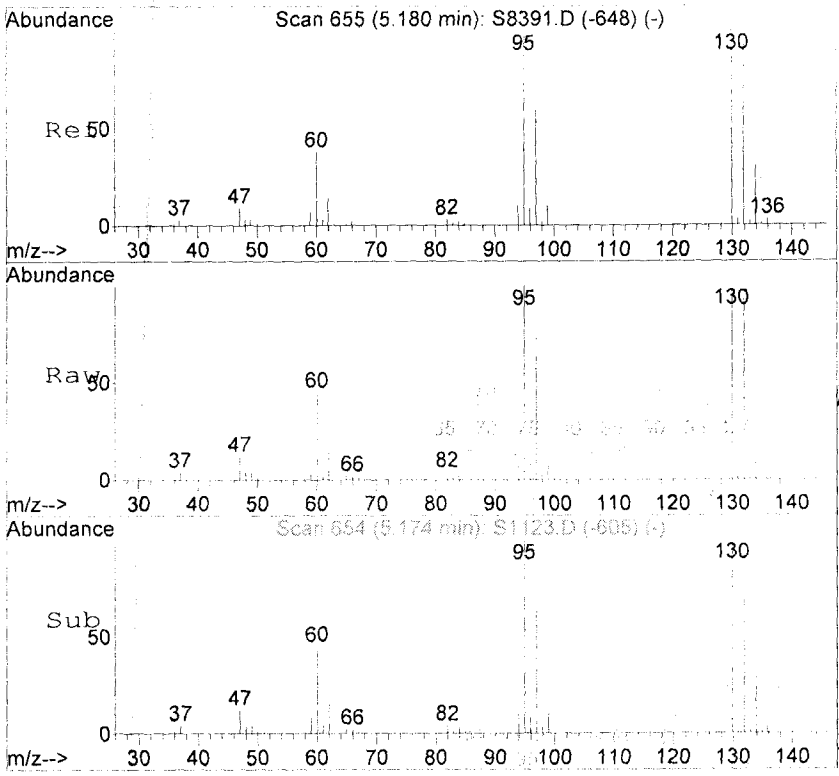


#23
C056 cis-1,2-Dichloroethene
Concen: 99.69 ug/L
RT: 4.07 min Scan# 472
Delta R.T. 0.01 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion: 96 Resp: 501582

Ion	Ratio	Lower	Upper
96	100		
61	129.6	99.9	159.9
98	64.6	31.8	91.8

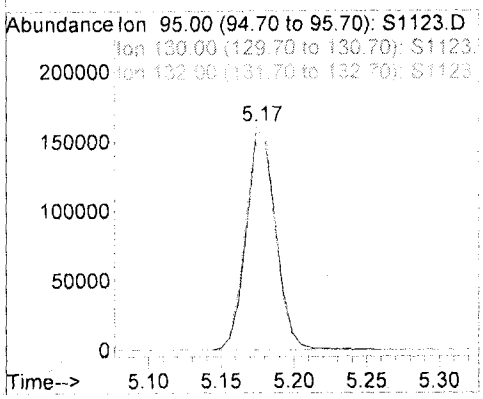


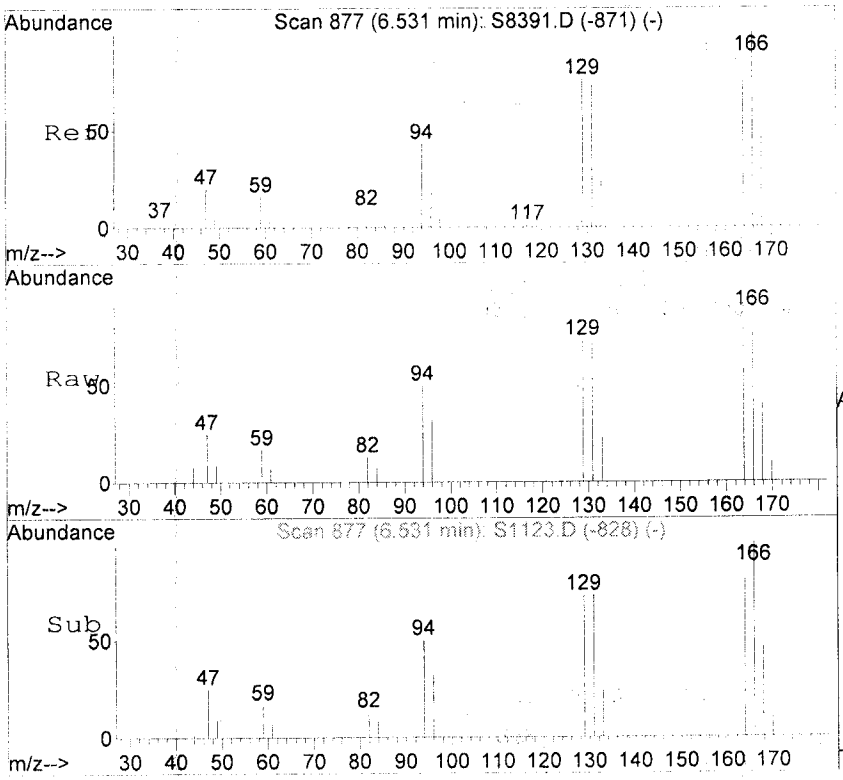


#36
C150 Trichloroethene
Concen: 47.22 ug/L
RT: 5.17 min Scan# 654
Delta R.T. 0.00 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion: 95 Resp: 227188

Ion	Ratio	Lower	Upper
95	100		
130	97.0	77.6	137.6
132	92.7	72.8	132.8

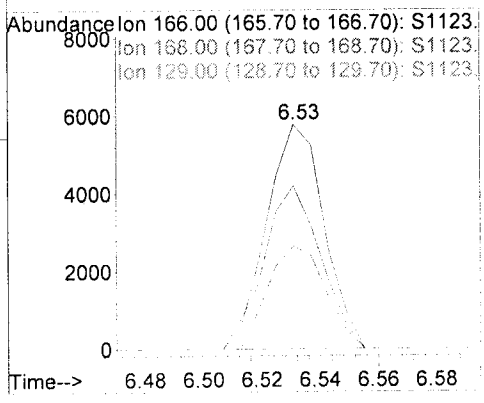




#50
C220 Tetrachloroethene
Concen: 1.50 ug/L
RT: 6.53 min Scan# 877
Delta R.T. 0.00 min
Lab File: S1123.D
Acq: 24 Nov 2009 19:56

Tgt Ion:166 Resp: 7893

Ion	Ratio	Lower	Upper
166	100		
168	45.8	18.6	78.6
129	72.7	39.3	99.3



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-5

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-06RE1 File ID: S1137.D

Sampled: 11/19/09 11:25 Prepared: 11/24/09 08:00 Analyzed: 11/25/09 13:32

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	8	8.0	UD
79-34-5	1,1,2,2-Tetrachloroethane	8	8.0	UD
79-00-5	1,1,2-Trichloroethane	8	8.0	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	8	8.0	UD
75-34-3	1,1-Dichloroethane	8	450	D
75-35-4	1,1-Dichloroethene	8	8.0	UD
120-82-1	1,2,4-Trichlorobenzene	8	8.0	UD
96-12-8	1,2-Dibromo-3-chloropropane	8	8.0	UD
106-93-4	1,2-Dibromoethane (EDB)	8	8.0	UD
95-50-1	1,2-Dichlorobenzene	8	8.0	UD
107-06-2	1,2-Dichloroethane	8	8.0	UD
540-59-0	1,2-Dichloroethene, Total	8	100	D
78-87-5	1,2-Dichloropropane	8	8.0	UD
541-73-1	1,3-Dichlorobenzene	8	8.0	UD
106-46-7	1,4-Dichlorobenzene	8	8.0	UD
78-93-3	2-Butanone (MEK)	8	40	UD
591-78-6	2-Hexanone	8	40	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	8	40	UD
67-64-1	Acetone	8	40	UD
71-43-2	Benzene	8	8.0	UD
75-27-4	Bromodichloromethane	8	8.0	UD
75-25-2	Bromoform	8	8.0	UD
74-83-9	Bromomethane	8	8.0	UD
75-15-0	Carbon disulfide	8	8.0	UD
56-23-5	Carbon Tetrachloride	8	8.0	UD
108-90-7	Chlorobenzene	8	8.0	UD
124-48-1	Chlorodibromomethane	8	8.0	UD
75-00-3	Chloroethane	8	130	D
67-66-3	Chloroform	8	8.0	UD
74-87-3	Chloromethane	8	8.0	UD
156-59-2	cis-1,2-Dichloroethene	8	100	D
10061-01-5	cis-1,3-Dichloropropene	8	8.0	UD
110-82-7	Cyclohexane	8	8.0	UD
75-71-8	Dichlorodifluoromethane	8	8.0	UD
100-41-4	Ethylbenzene	8	8.0	UD
98-82-8	Isopropylbenzene	8	8.0	UD
79-20-9	Methyl Acetate	8	8.0	UD
1634-04-4	Methyl tert-Butyl Ether	8	8.0	UD
108-87-2	Methylcyclohexane	8	8.0	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-5

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: RSK0991-06RE1 File ID: S1137.D

Sampled: 11/19/09 11:25 Prepared: 11/24/09 08:00 Analyzed: 11/25/09 13:32

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	8	8.0	UD
100-42-5	Styrene	8	8.0	UD
127-18-4	Tetrachloroethene	8	8.0	UD
108-88-3	Toluene	8	8.0	UD
156-60-5	trans-1,2-Dichloroethene	8	8.0	UD
10061-02-6	trans-1,3-Dichloropropene	8	8.0	UD
79-01-6	Trichloroethene	8	48	D
75-69-4	Trichlorofluoromethane	8	8.0	UD
108-05-4	Vinyl acetate	8	40	UD
75-01-4	Vinyl chloride	8	23	D
1330-20-7	Xylenes, total	8	16	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.3	97	66 - 137	D
4-Bromofluorobenzene	25.0	24.1	96	73 - 120	D
Toluene-d8	25.0	23.8	95	71 - 126	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	176892	9.06	219341	9.06	
1,4-Difluorobenzene	357464	4.99	394951	4.99	
Chlorobenzene-d5	191591	7.19	219500	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1137.D Vial: 11
Acq On : 25 Nov 2009 13:32 Operator: DHC
Sample : RSK0991-06RE1@8X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:49 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

11/25/09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	4.99	114	357464	25.00 ug/L	0.00 90.51%
43) CI20 Chlorobenzene-D5	7.19	82	191591	25.00 ug/L	0.00 87.29%
63) CI30 1,4-Dichlorobenzene-	9.06	152	176892	25.00 ug/L	0.00 80.65%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.44	111	96537	24.97 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 99.88%		
31) CS15 1,2-Dichloroethane-D	4.69	65	123283	24.29 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery = 97.16%		
44) CS05 Toluene-D8	6.07	98	404294	23.85 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery = 95.40%		
62) CS10 p-Bromofluorobenzene	8.12	174	123631	24.09 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery = 96.36%		
Target Compounds					Qvalue
2) C290 Dichlorodifluorome	0.00	85	0	N.D.	
3) C010 Chloromethane	0.00	50	0	N.D.	
4) C020 Vinyl chloride	1.53	62	16273	2.91 ug/L	86
5) C015 Bromomethane	0.00	94	0	N.D.	
6) C025 Chloroethane	1.90	64	13139	16.78 ug/L	91
7) C275 Trichlorofluoromet	0.00	101	0	N.D.	
8) C045 1,1-Dichloroethene	2.59	96	1068	N.D.	
9) C030 Methylene chloride	3.05	84	707	N.D.	
10) C040 Carbon disulfide	2.78	76	723	N.D.	
11) C036 Acrolein	0.00	56	0	N.D.	
12) C038 Acrylonitrile	0.00	53	0	N.D.	
13) C035 Acetone	2.73	43	1101	N.D.	
14) C300 Acetonitrile	0.00	41	0	N.D.	
15) C276 Iodomethane	0.00	142	0	N.D.	
16) C291 1,1,2-Trichloro-1,	2.58	101	1355	N.D.	
17) C962 T-butyl Methyl Eth	0.00	73	0	N.D.	
18) C057 trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255 Methyl Acetate	0.00	43	0	N.D.	
20) C050 1,1-Dichloroethane	3.60	63	446556	56.55 ug/L	99
21) C125 Vinyl Acetate	0.00	43	0	N.D.	
22) C051 2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056 cis-1,2-Dichloroethe	4.07	96	60359	12.79 ug/L	98
24) C272 Tetrahydrofuran	4.33	42	270	N.D.	
25) C222 Bromochloromethane	0.00	128	0	N.D.	
27) C060 Chloroform	0.00	83	0	N.D.	
28) C115 1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120 Carbon tetrachlori	0.00	117	0	N.D.	
30) C116 1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165 Benzene	4.70	78	145	N.D.	
33) C065 1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110 2-Butanone	0.00	43	0	N.D.	
35) C256 Cyclohexane	0.00	56	0	N.D.	
36) C150 Trichloroethene	5.17	95	27103	6.01 ug/L	92
37) C140 1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278 Dibromomethane	0.00	93	0	N.D.	

12/2/09

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1137.D Vial: 11
Acq On : 25 Nov 2009 13:32 Operator: DHC
Sample : RSK0991-06RE1@8X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 15:10:49 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	900	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1548	N.D.	
50) C220	Tetrachloroethene	6.54	166	761	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.19	91	367	N.D.	
58) C246	m,p-Xylene	7.36	106	145	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.11	91	263	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	0.00	128	0	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

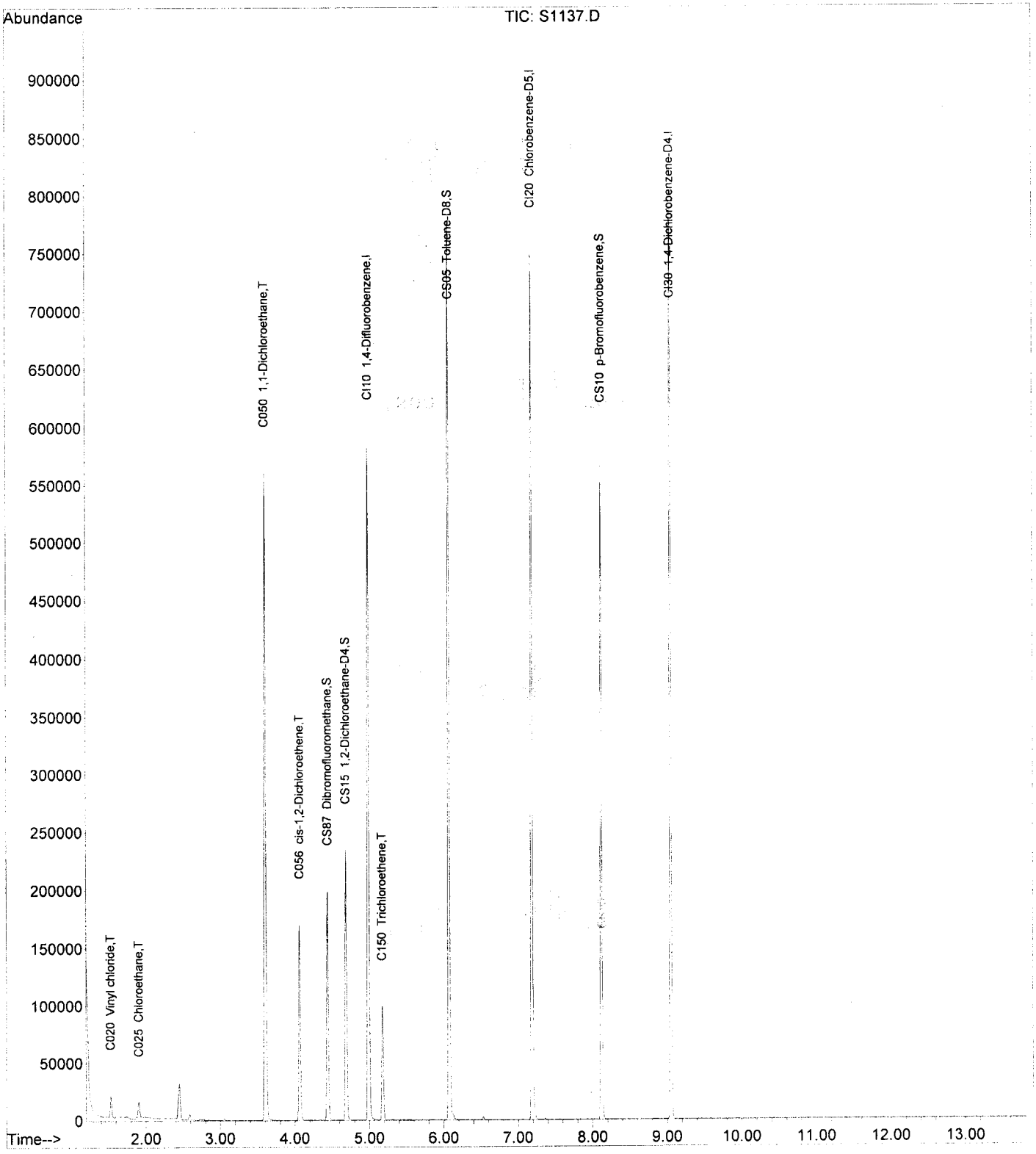
(#) = qualifier out of range (m) = manual integration (+) = signals summed

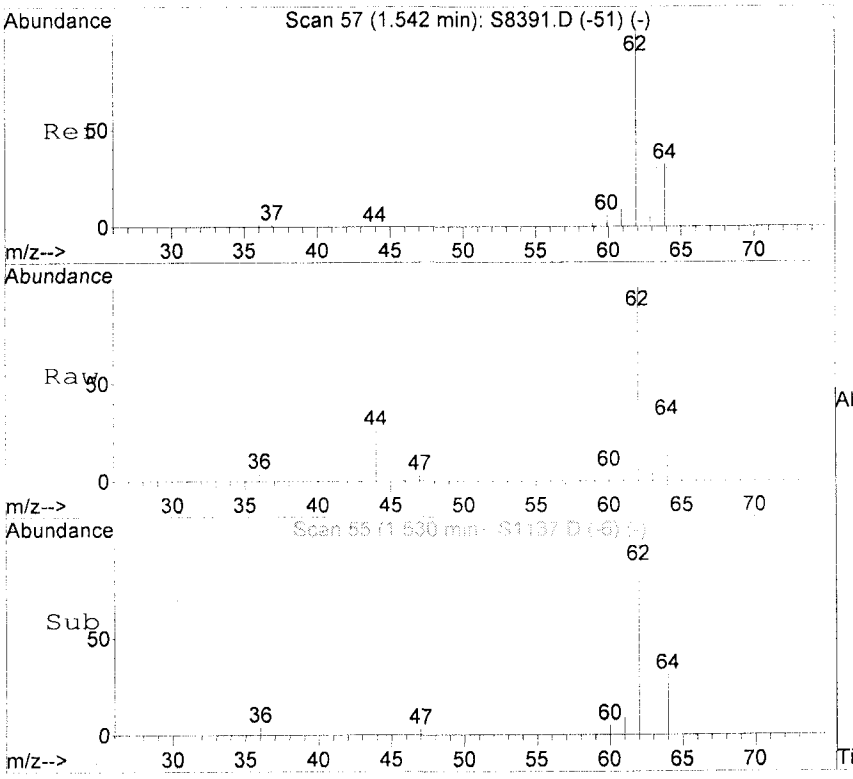
1/21/10

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112509\S1137.D Vial: 11
Acq On : 25 Nov 2009 13:32 Operator: DHC
Sample : RSK0991-06RE1@8X Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 25 15:10:49 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA

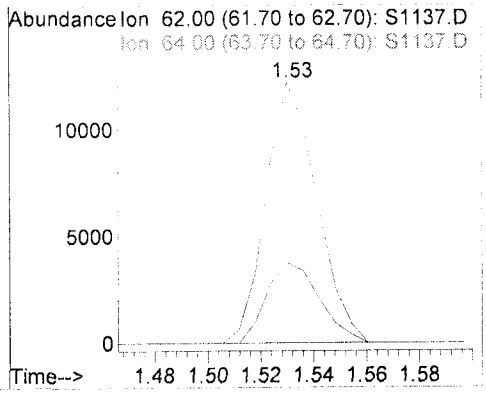


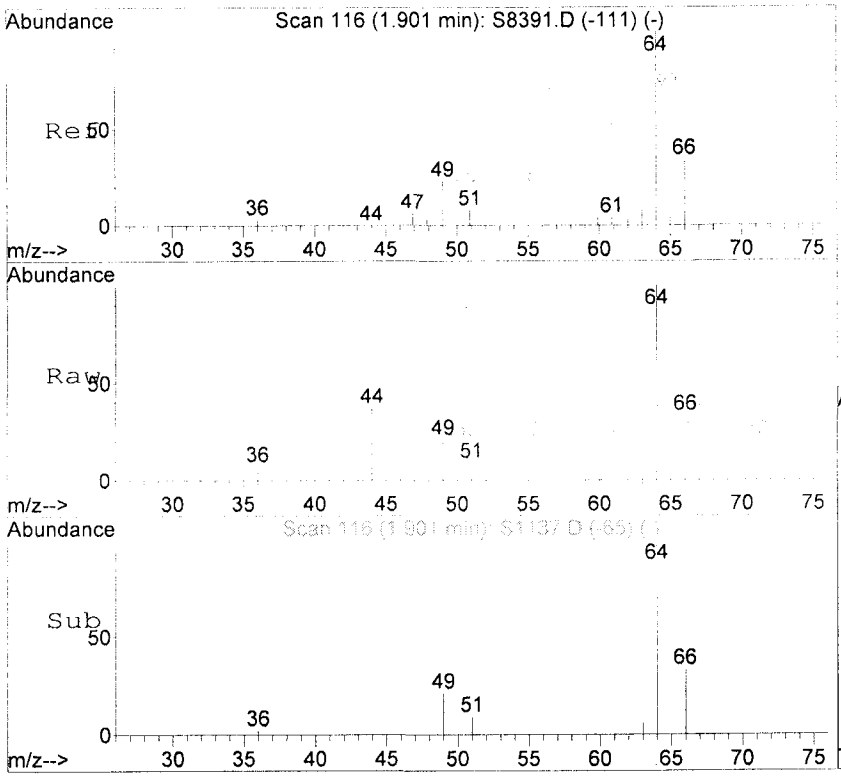


#4
C020 Vinyl chloride
Concen: 2.91 ug/L
RT: 1.53 min Scan# 55
Delta R.T. 0.00 min
Lab File: S1137.D
Acq: 25 Nov 2009 13:32

Tgt Ion: 62 Resp: 16273

Ion	Ratio	Lower	Upper
62	100		
64	30.7	9.4	69.4

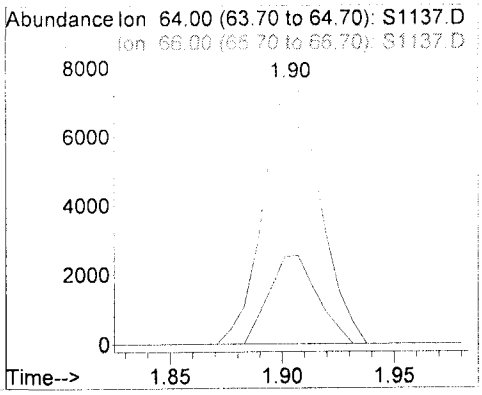


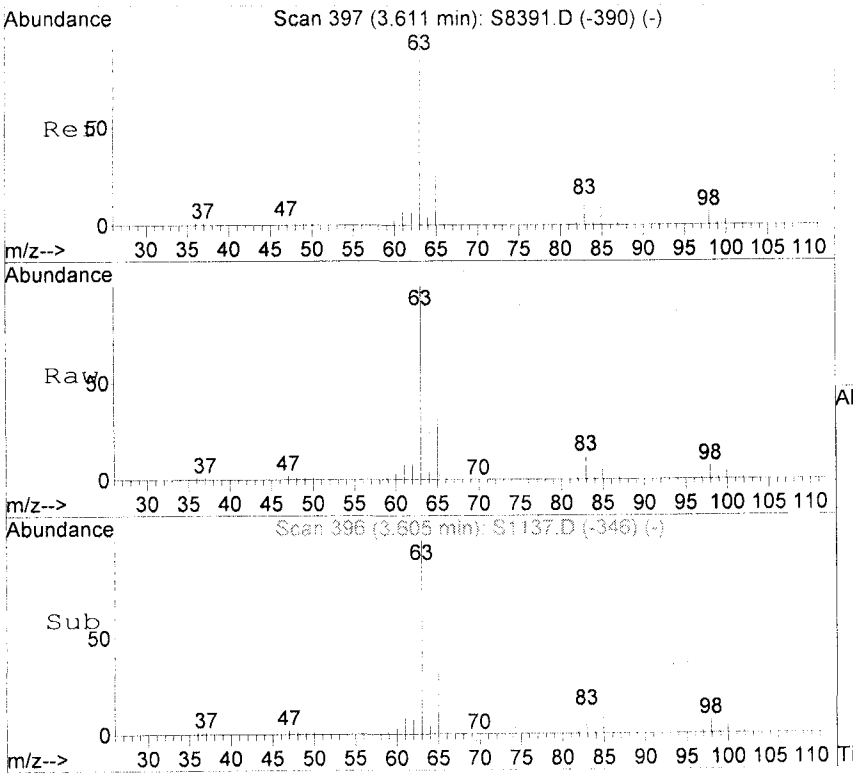


#6
C025 Chloroethane
Concen: 16.78 ug/L
RT: 1.90 min Scan# 116
Delta R.T. 0.01 min
Lab File: S1137.D
Acq: 25 Nov 2009 13:32

Tgt Ion: 64 Resp: 13139

Ion	Ratio	Lower	Upper
64	100		
66	33.0	8.3	68.3

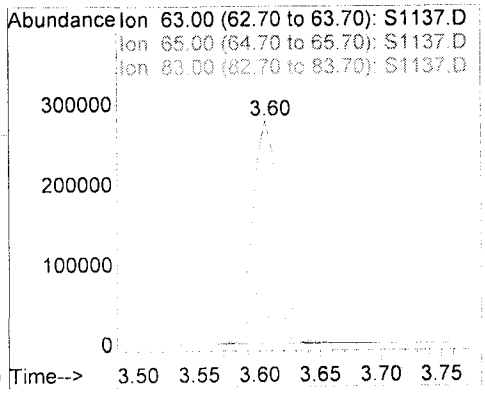


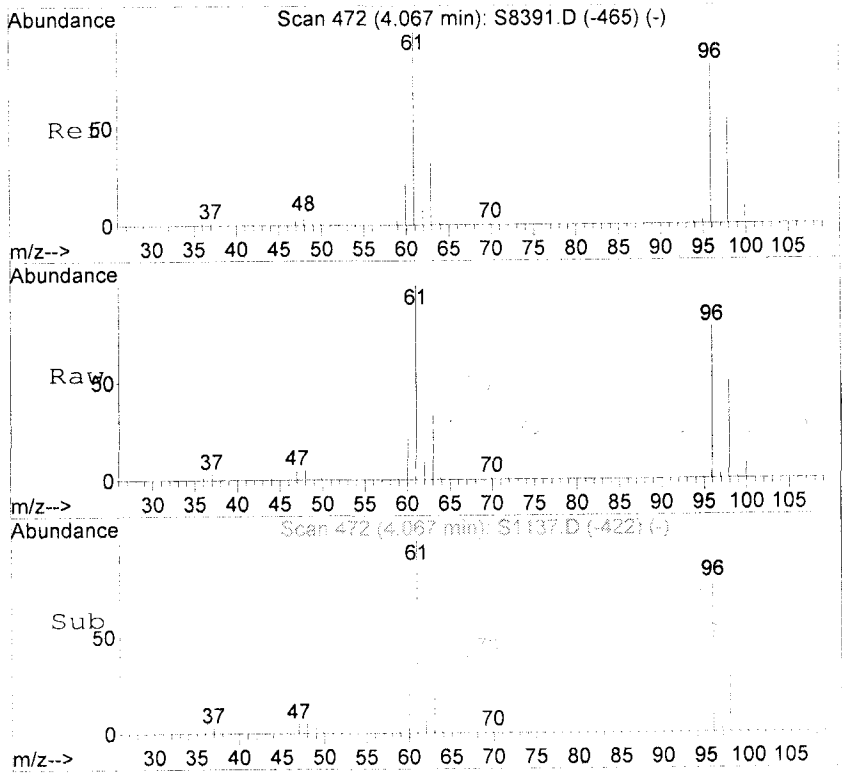


#20
C050 1,1-Dichloroethane
Concen: 56.55 ug/L
RT: 3.60 min Scan# 396
Delta R.T. 0.01 min
Lab File: S1137.D
Acq: 25 Nov 2009 13:32

Tgt Ion: 63 Resp: 446556

Ion	Ratio	Lower	Upper
63	100		
65	31.4	1.5	61.5
83	12.4	0.0	43.0

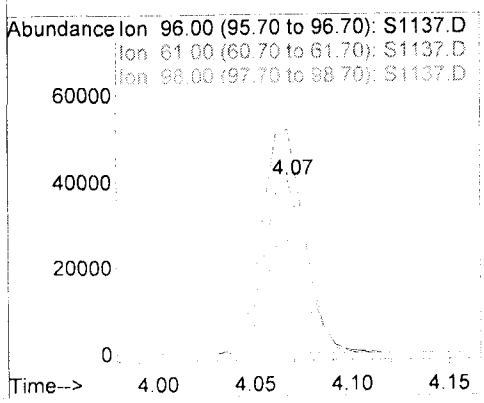


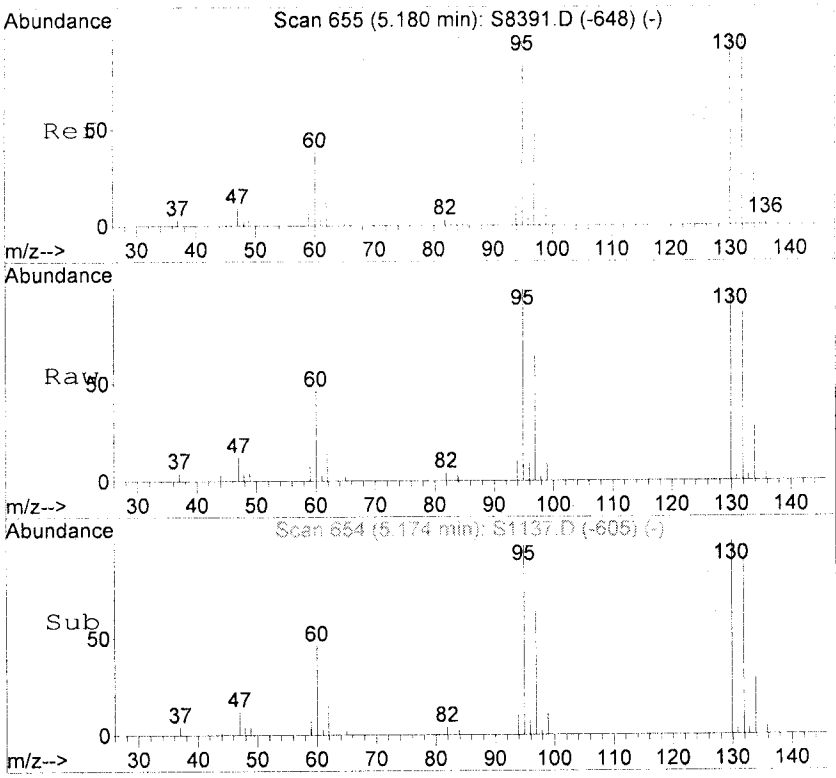


#23
C056 cis-1,2-Dichloroethene
Concen: 12.79 ug/L
RT: 4.07 min Scan# 472
Delta R.T. 0.01 min
Lab File: S1137.D
Acq: 25 Nov 2009 13:32

Tgt Ion: 96 Resp: 60359

Ion	Ratio	Lower	Upper
96	100		
61	128.9	99.9	159.9
98	64.8	31.8	91.8

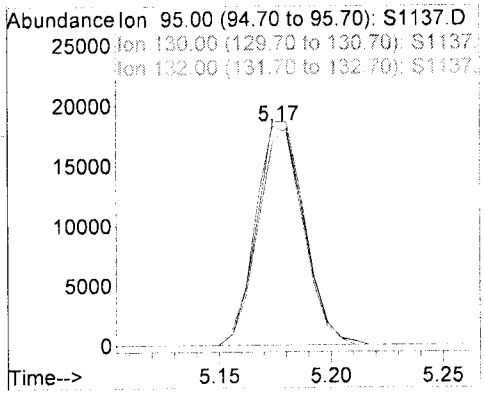




#36
C150 Trichloroethene
Concen: 6.01 ug/L
RT: 5.17 min Scan# 654
Delta R.T. 0.00 min
Lab File: S1137.D
Acq: 25 Nov 2009 13:32

Tgt Ion: 95 Resp: 27103

Ion	Ratio	Lower	Upper
95	100		
130	102.1	77.6	137.6
132	92.3	72.8	132.8



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-6 (11-12)

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Solid Laboratory ID: RSK0991-07 File ID: G6475.D

Sampled: 11/18/09 11:15 Prepared: 11/27/09 09:00 Analyzed: 11/27/09 16:47

Solids: 72.28 Preparation: Methanol Prep Initial/Final: 5.14 g / 500 mL

Batch: 9K27033 Sequence: RK92704 Calibration: R9K1805 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg)	Q
71-55-6	1,1,1-Trichloroethane	1	130	U
79-34-5	1,1,2,2-Tetrachloroethane	1	130	U
79-00-5	1,1,2-Trichloroethane	1	130	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	130	U
75-34-3	1,1-Dichloroethane	1	130	U
75-35-4	1,1-Dichloroethene	1	130	U
120-82-1	1,2,4-Trichlorobenzene	1	130	U
96-12-8	1,2-Dibromo-3-chloropropane	1	130	U
106-93-4	1,2-Dibromoethane (EDB)	1	130	U
95-50-1	1,2-Dichlorobenzene	1	130	U
107-06-2	1,2-Dichloroethane	1	130	U
78-87-5	1,2-Dichloropropane	1	130	U
541-73-1	1,3-Dichlorobenzene	1	130	U
106-46-7	1,4-Dichlorobenzene	1	130	U
78-93-3	2-Butanone (MEK)	1	510	J
591-78-6	2-Hexanone	1	670	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	670	U
67-64-1	Acetone	1	670	U
71-43-2	Benzene	1	130	U
75-27-4	Bromodichloromethane	1	130	U
75-25-2	Bromoform	1	130	U
74-83-9	Bromomethane	1	130	U
75-15-0	Carbon disulfide	1	130	U
56-23-5	Carbon Tetrachloride	1	130	U
108-90-7	Chlorobenzene	1	130	U
124-48-1	Chlorodibromomethane	1	130	U
75-00-3	Chloroethane	1	130	U
67-66-3	Chloroform	1	130	U
74-87-3	Chloromethane	1	130	U
156-59-2	cis-1,2-Dichloroethene	1	130	U
10061-01-5	cis-1,3-Dichloropropene	1	130	U
110-82-7	Cyclohexane	1	130	U
75-71-8	Dichlorodifluoromethane	1	130	U
100-41-4	Ethylbenzene	1	4200	
98-82-8	Isopropylbenzene	1	130	U
79-20-9	Methyl Acetate	1	130	U
1634-04-4	Methyl tert-Butyl Ether	1	130	U
108-87-2	Methylcyclohexane	1	130	U
75-09-2	Methylene Chloride	1	130	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

GW-6 (11-12)

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Solid	Laboratory ID:	RSK0991-07	File ID:	G6475.D
Sampled:	11/18/09 11:15	Prepared:	11/27/09 09:00	Analyzed:	11/27/09 16:47
Solids:	72.28	Preparation:	Methanol Prep	Initial/Final:	5.14 g / 500 mL
Batch:	9K27033	Sequence:	RK92704	Calibration:	R9K1805
Instrument:	HP5973G				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg)	Q
100-42-5	Styrene	1	130	U
127-18-4	Tetrachloroethene	1	170000	E
108-88-3	Toluene	1	10000	
156-60-5	trans-1,2-Dichloroethene	1	130	U
10061-02-6	trans-1,3-Dichloropropene	1	130	U
79-01-6	Trichloroethene	1	3100	
75-69-4	Trichlorofluoromethane	1	130	U
75-01-4	Vinyl chloride	1	270	U
1330-20-7	Xylenes, total	1	15000	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	3360	4480	133	10 - 190	
4-Bromofluorobenzene	3360	4200	125	10 - 190	
Toluene-d8	3360	4520	134	10 - 190	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	146117	10.73	182026	10.73	
1,4-Difluorobenzene	318257	5.45	345489	5.45	
Chlorobenzene-d5	160283	8.32	173310	8.32	

* Values outside of QC limits

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6475.D Vial: 18
Acq On : 27 Nov 2009 16:47 Operator: DHC
Sample : RSK0991-07 Inst : HP5973G
Misc : ML QC 11-27 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 28 09:57:33 2009 Results File: R9K1805-SIXPT.RES

REI @20X 5114

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112709\G6459.D (27 Nov 2009 10:12)

GE DHPE 11/28/09

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	318257	25.00 ug/L	0.00 92.12%
43) CI20 Chlorobenzene-D5	8.32	82	160283	25.00 ug/L	0.00 92.48%
63) CI30 1,4-Dichlorobenzene-	10.73	152	146117	25.00 ug/L	0.00 80.27%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.76	111	119124	31.33 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 125.32%		
31) CS15 1,2-Dichloroethane-D	5.06	65	145205	33.26 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery = 133.04%		
44) CS05 Toluene-D8	6.85	98	512365	33.57 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery = 134.28%#		
62) CS10 p-Bromofluorobenzene	9.58	174	150264	31.23 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery = 124.92%#		
Target Compounds					Qvalue
2) C290 Dichlorodifluorome	0.00	85	0	N.D.	
3) C010 Chloromethane	0.00	50	0	N.D.	
4) C020 Vinyl chloride	0.00	62	0	N.D.	
5) C015 Bromomethane	0.00	94	0	N.D.	
6) C025 Chloroethane	0.00	64	0	N.D.	
7) C275 Trichlorofluoromet	0.00	101	0	N.D.	
8) C045 1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030 Methylene chloride	3.09	84	931	N.D.	
10) C040 Carbon disulfide	2.76	76	2497	N.D.	
11) C036 Acrolein	0.00	56	0	N.D.	
12) C038 Acrylonitrile	0.00	53	0	N.D.	
13) C035 Acetone	2.78	43	234	N.D.	
14) C300 Acetonitrile	3.03	41	68	N.D.	
15) C276 Iodomethane	0.00	142	0	N.D.	
16) C291 1,1,2-Trichloro-1,	0.00	101	0	N.D.	
17) C962 T-butyl Methyl Eth	0.00	73	0	N.D.	
18) C057 trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255 Methyl Acetate	3.04	43	1114	N.D.	
20) C050 1,1-Dichloroethane	3.74	63	358	N.D.	
21) C125 Vinyl Acetate	0.00	43	0	N.D.	
22) C051 2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056 cis-1,2-Dichloroet	4.29	96	957	N.D.	
24) C272 Tetrahydrofuran	~~4.66~~	~~42~~	~~1342~~	~~1.15 ug/L~~	79
25) C222 Bromochloromethane	0.00	128	0	N.D.	
27) C060 Chloroform	4.60	83	285	N.D.	
28) C115 1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120 Carbon tetrachlori	0.00	117	0	N.D.	
30) C116 1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165 Benzene	0.00	78	0	N.D.	
33) C065 1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110 2-Butanone	4.38	43	6434	3.80 ug/L	99
35) C256 Cyclohexane	0.00	56	0	N.D.	
36) C150 Trichloroethene	5.68	95	122796	22.89 ug/L	97
37) C140 1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278 Dibromomethane	0.00	93	0	N.D.	

mp 11/30/09

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6475.D Vial: 18
Acq On : 27 Nov 2009 16:47 Operator: DHC
Sample : RSK0991-07 Inst : HP5973G
Misc : ML QC 11-27 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 28 09:57:33 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112709\G6459.D (27 Nov 2009 10:12)

Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.		
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.		
41) C012	Methylcyclohexane	5.81	83	3553	N.D.		
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.		
45) C230	Toluene	6.92	92	1064167	77.57	ug/L	95
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.		
47) C284	Ethyl Methacrylate	7.23	69	3491	0.67	ug/L #	24
48) C160	1,1,2-Trichloroethan	7.45	83	111105	33.44	ug/L #	31
49) C210	4-Methyl-2-pentanone	6.75	43	2561	0.58	ug/L #	43
50) C220	Tetrachloroethene	7.46	166	7507099	1276.19	ug/L	96
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.		
52) C155	Dibromochlorometha	7.81	129	31	N.D.		
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.		
54) C215	2-Hexanone	7.57	43	5086	1.65	ug/L #	1
55) C235	Chlorobenzene	8.35	112	347	N.D.		
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.		
57) C240	Ethylbenzene	8.45	91	820837	31.14	ug/L	99
58) C246	m,p-Xylene	8.57	106	978762	95.48	ug/L	100
59) C247	o-Xylene	8.99	106	167974	16.62	ug/L	95
60) C245	Styrene	9.00	104	8146	0.61	ug/L #	1
61) C180	Bromoform	0.00	173	0	N.D.		
64) C966	Isopropylbenzene	9.38	105	5965	N.D.		
65) C301	Bromobenzene	0.00	156	0	N.D.		
66) C225	1,1,2,2-Tetrachlor	9.81	83	280	N.D.		
67) C282	1,2,3-Trichloropro	9.84	110	65	N.D.		
68) C283	t-1,4-Dichloro-2-B	9.81	51	120	N.D.		
69) C302	n-Propylbenzene	9.82	91	3906	N.D.		
70) C303	2-Chlorotoluene	0.00	126	0	N.D.		
71) C289	4-Chlorotoluene	0.00	126	0	N.D.		
72) C304	1,3,5-Trimethylben	9.99	105	3892	N.D.		
73) C306	tert-Butylbenzene	0.00	134	0	N.D.		
74) C307	1,2,4-Trimethylben	10.37	105	9172	N.D.		
75) C308	sec-Butylbenzene	10.52	105	892	N.D.		
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.		
77) C309	4-Isopropyltoluene	10.66	119	956	N.D.		
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.		
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.		
80) C310	n-Butylbenzene	11.05	91	3115	N.D.		
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.		
82) C313	1,2,4-Trichloroben	12.68	180	383	N.D.		
83) C316	Hexachlorobutadien	0.00	225	0	N.D.		
84) C314	Naphthalene	12.72	128	17266	1.65	ug/L	96
85) C934	1,2,3-Trichloroben	12.91	180	317	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

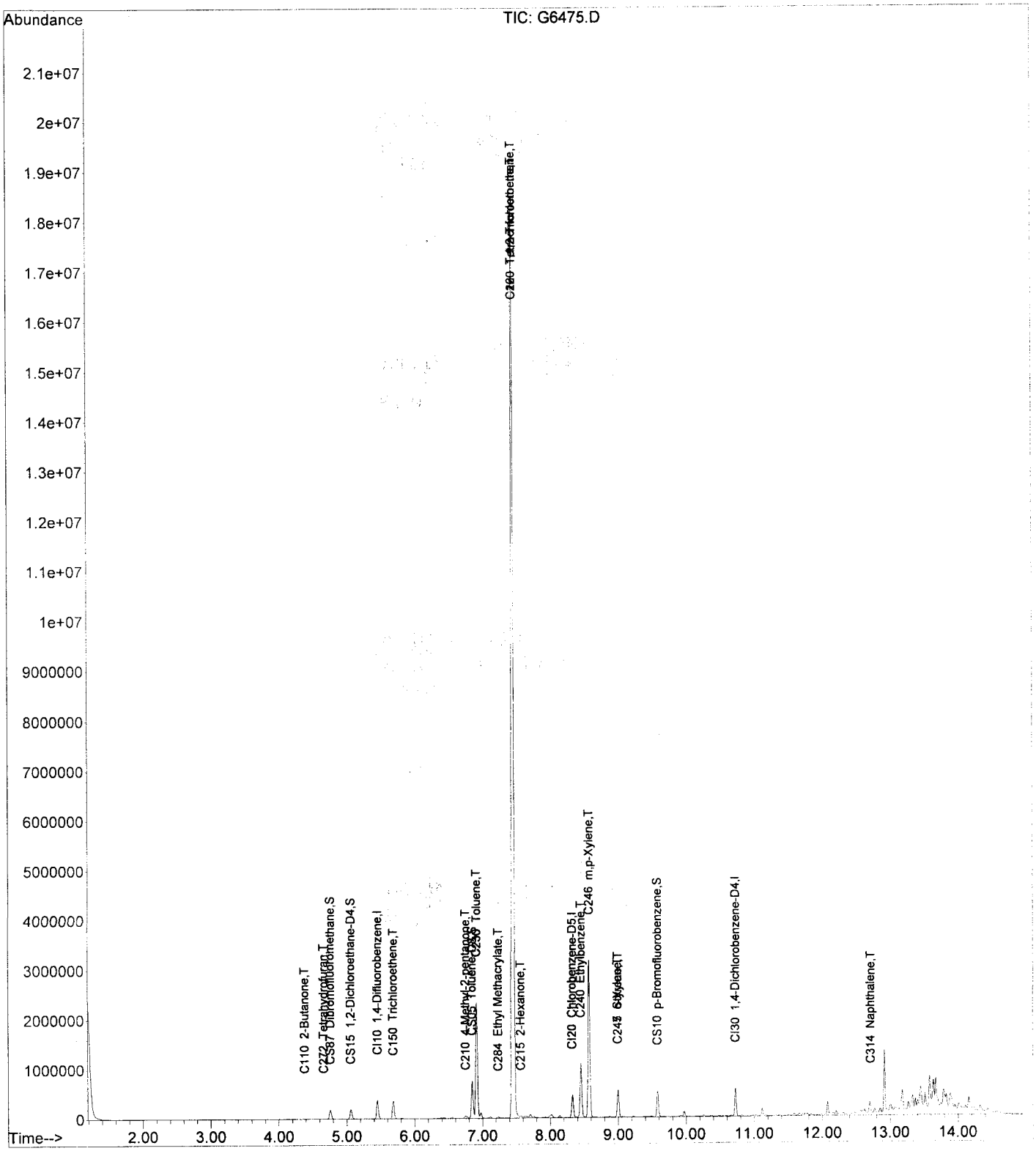
11/28/09

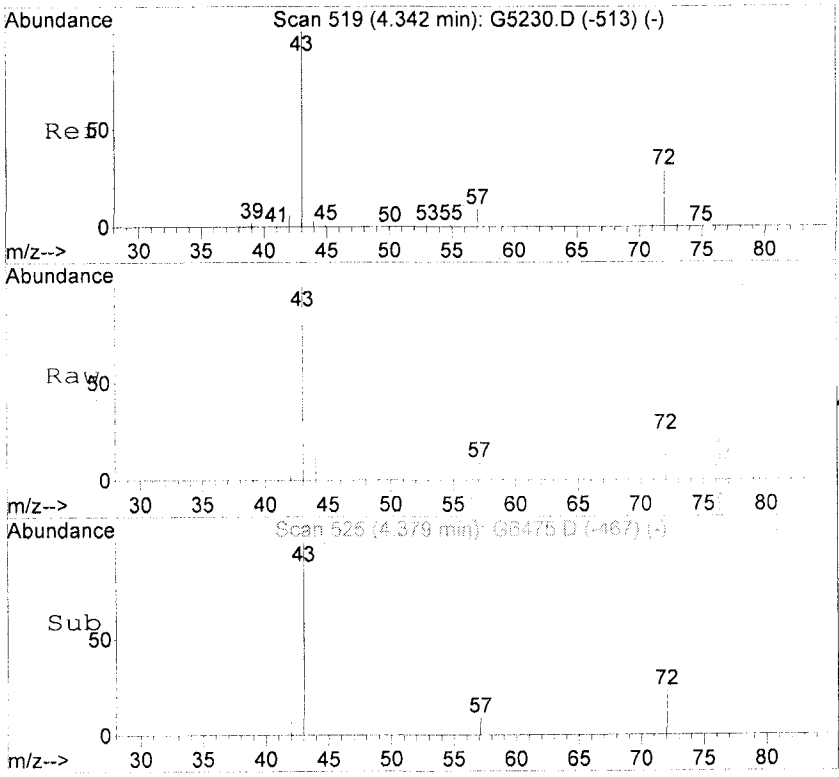
Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6475.D
Acq On : 27 Nov 2009 16:47
Sample : RSK0991-07
Misc : ML QC 11-27
MS Integration Params: RTEINT.P

Vial: 18
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 28 09:57:33 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA

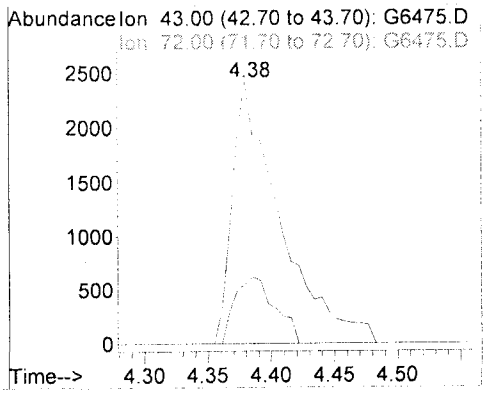


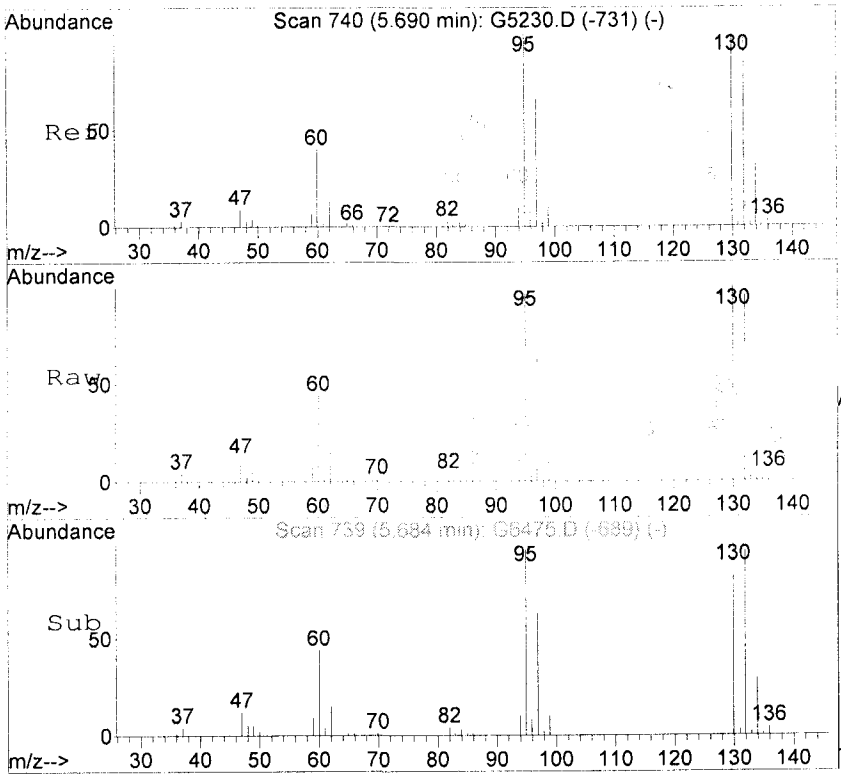


#34
C110 2-Butanone
Concen: 3.80 ug/L
RT: 4.38 min Scan# 525
Delta R.T. 0.05 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion: 43 Resp: 6434

Ion	Ratio	Lower	Upper
43	100		
72	22.8	0.0	52.2

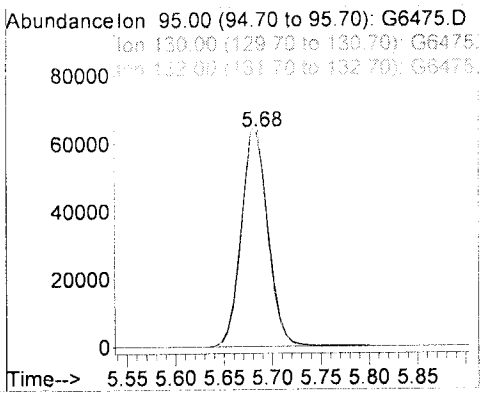


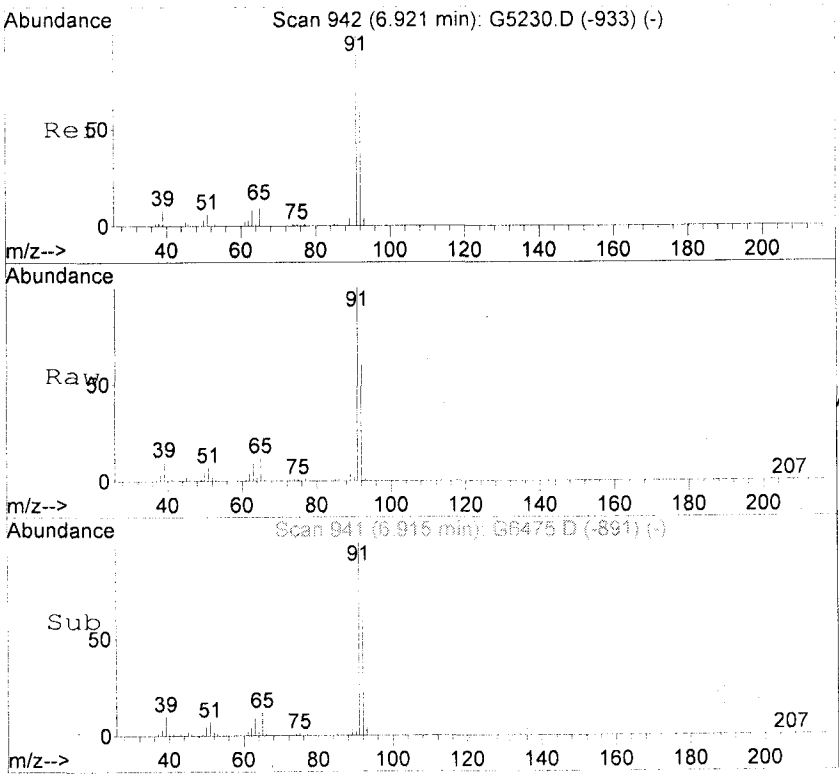


#36
C150 Trichloroethene
Concen: 22.89 ug/L
RT: 5.68 min Scan# 739
Delta R.T. 0.01 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion: 95 Resp: 122796

Ion	Ratio	Lower	Upper
95	100		
130	104.3	77.6	137.6
132	99.4	72.8	132.8

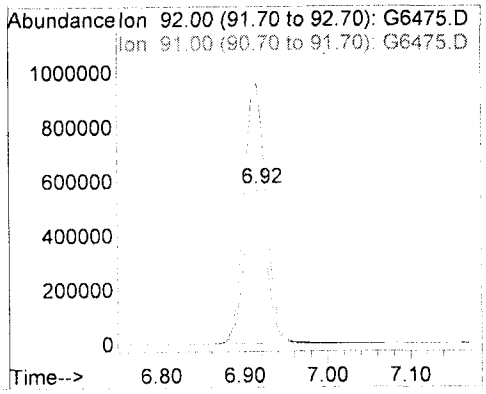


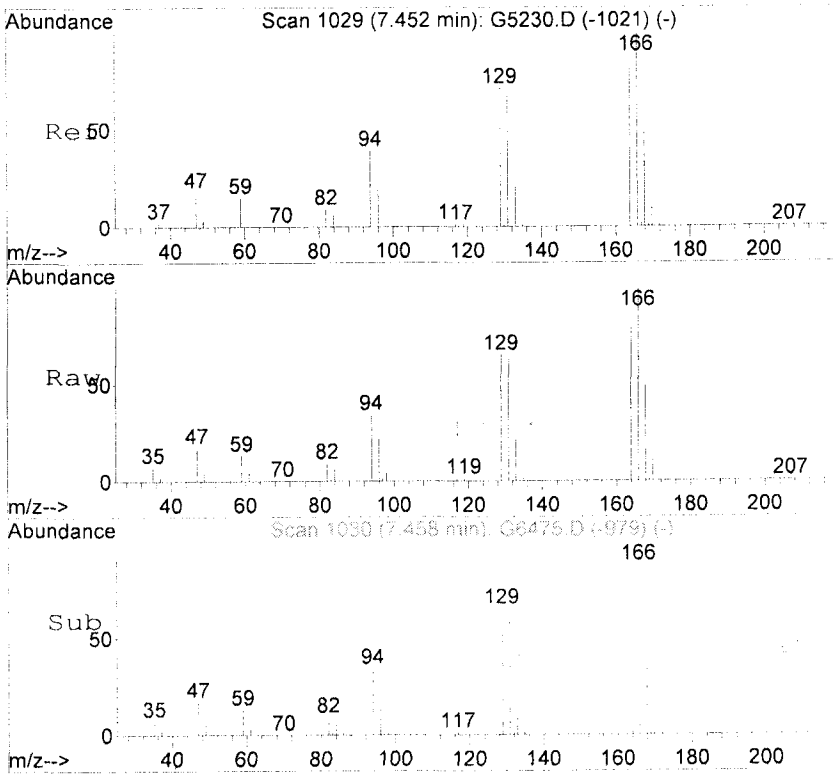


#45
C230 Toluene
Concen: 77.57 ug/L
RT: 6.92 min Scan# 941
Delta R.T. 0.01 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion: 92 Resp: 1064167

Ion	Ratio	Lower	Upper
92	100		
91	167.6	131.1	191.1

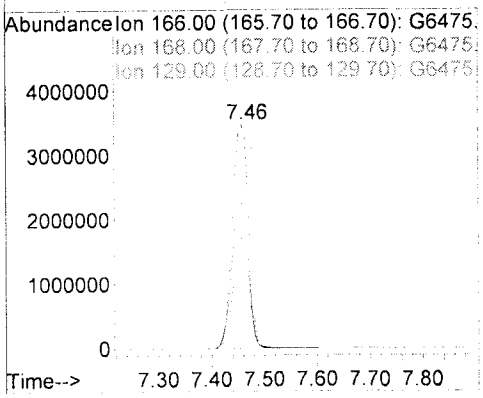


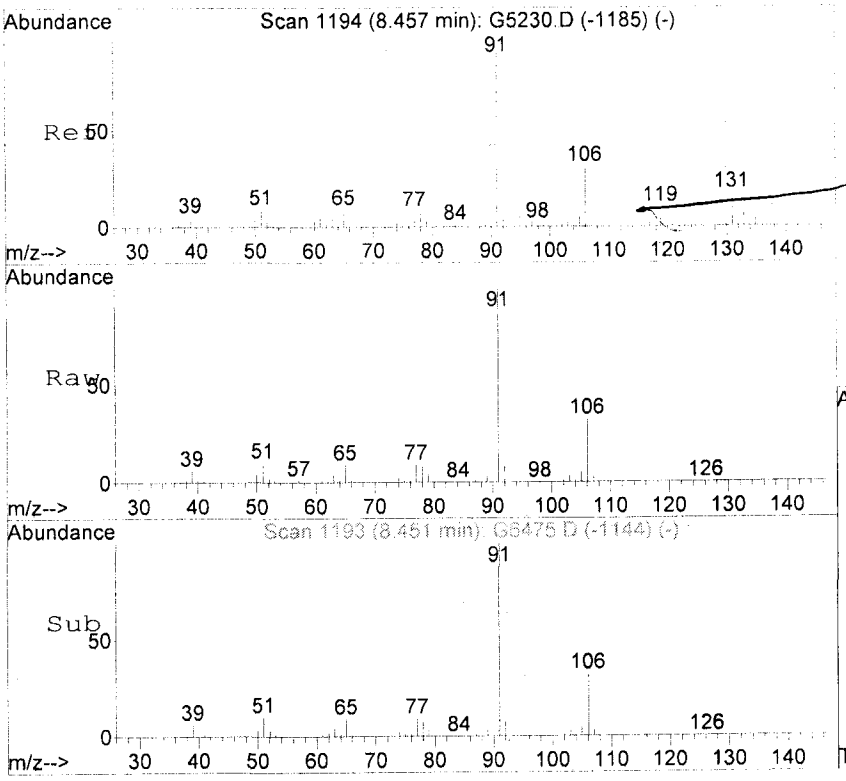


#50
C220 Tetrachloroethene
Concen: 1276.19 ug/L
RT: 7.46 min Scan# 1030
Delta R.T. 0.01 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion:166 Resp: 7507099

Ion	Ratio	Lower	Upper
166	100		
168	49.3	18.6	78.6
129	64.8	39.3	99.3

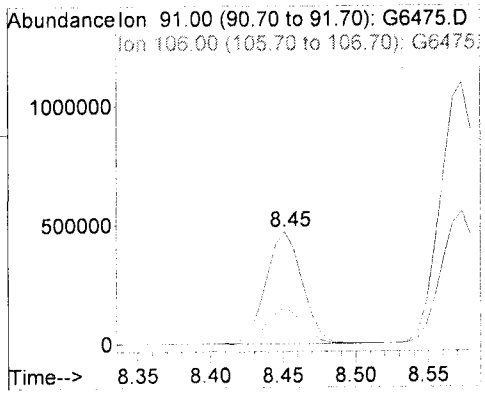


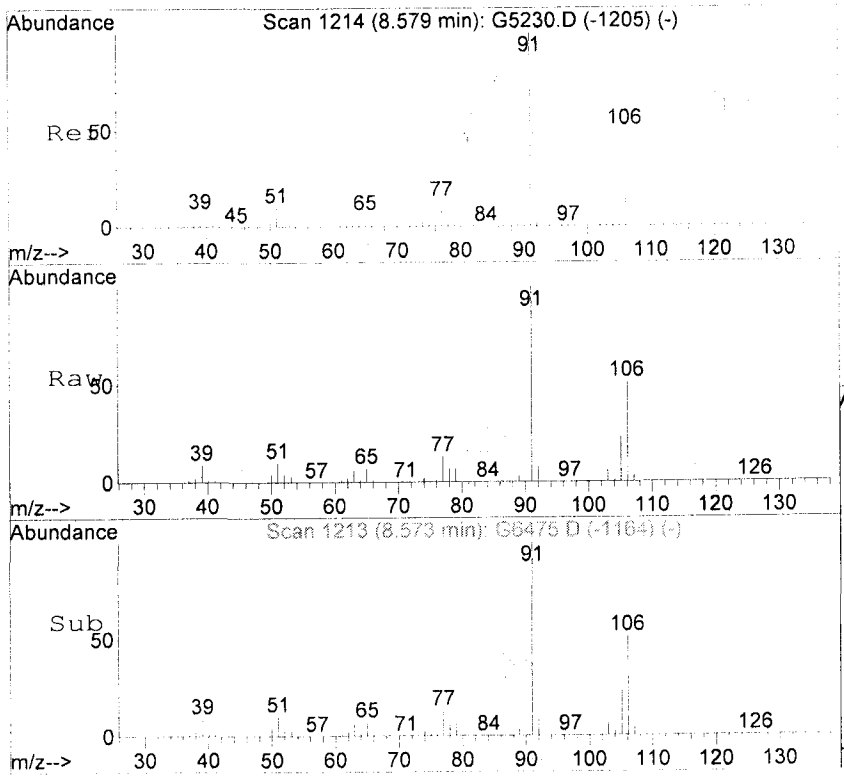


#57
C240 Ethylbenzene
Concen: 31.14 ug/L
RT: 8.45 min Scan# 1193
Delta R.T. -0.00 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion: 91 Resp: 820837

Ion	Ratio	Lower	Upper
91	100		
106	31.9	1.6	61.6

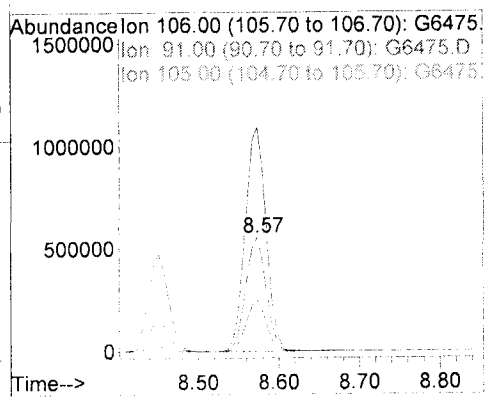


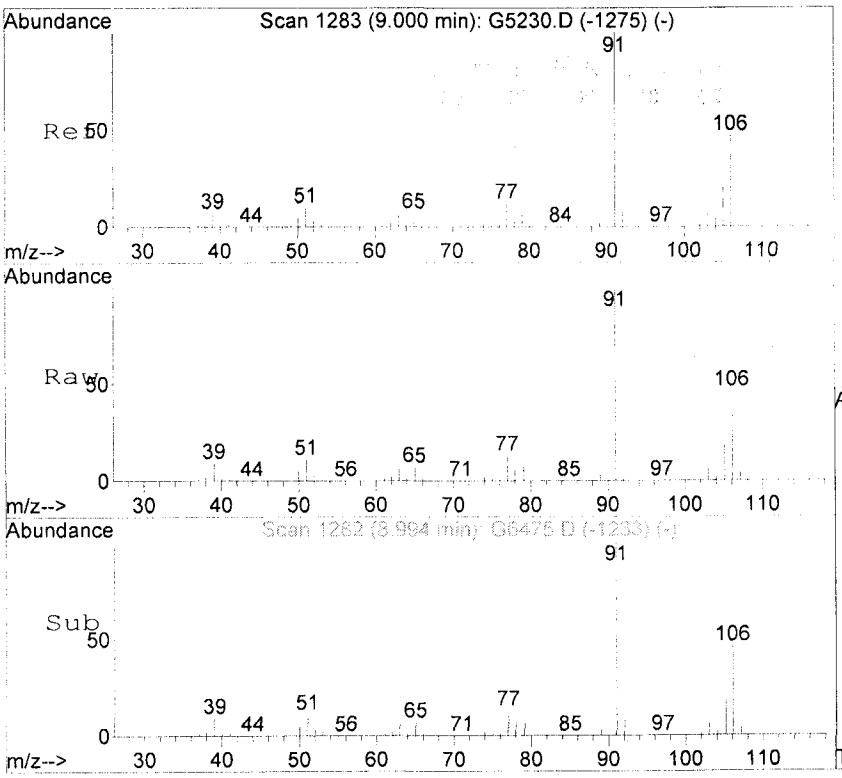


#58
C246 m,p-Xylene
Concen: 95.48 ug/L
RT: 8.57 min Scan# 1213
Delta R.T. -0.00 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion:106 Resp: 978762

Ion	Ratio	Lower	Upper
106	100		
91	197.3	167.2	227.2
105	44.8	15.1	75.1

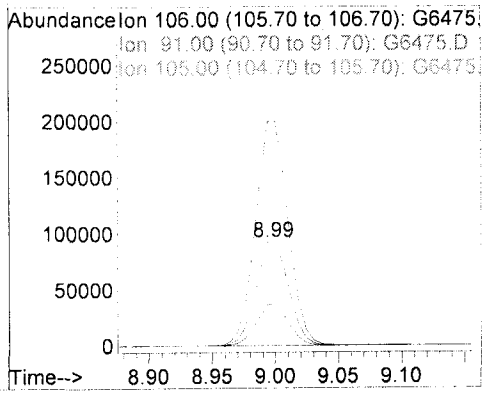


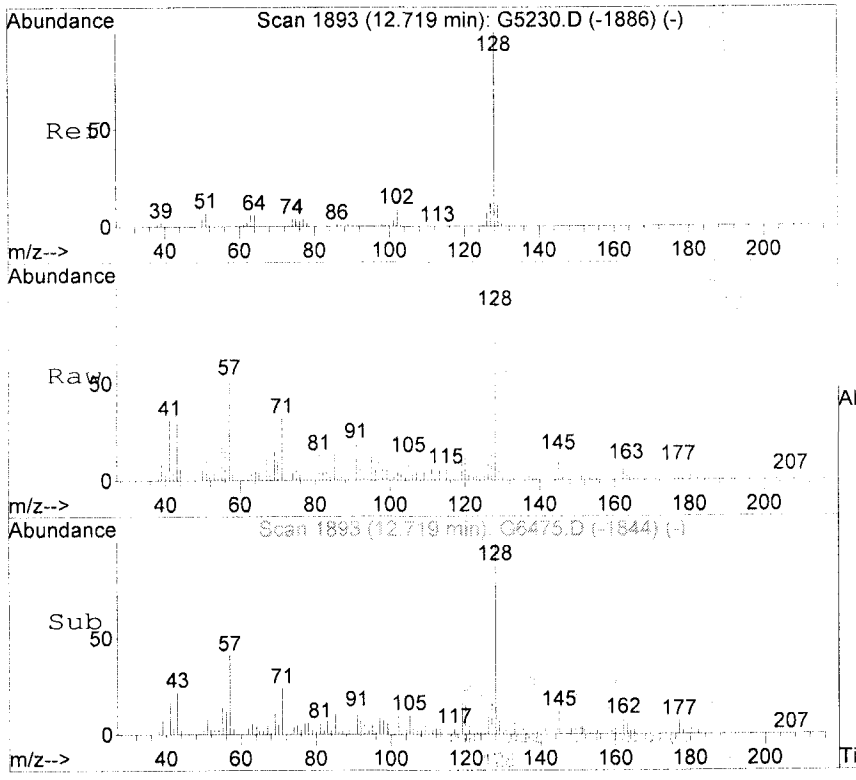


#59
C247 o-Xylene
Concen: 16.62 ug/L
RT: 8.99 min Scan# 1282
Delta R.T. -0.00 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion:106 Resp: 167974

Ion	Ratio	Lower	Upper
106	100		
91	215.9	179.4	239.4
105	39.7	15.7	75.7

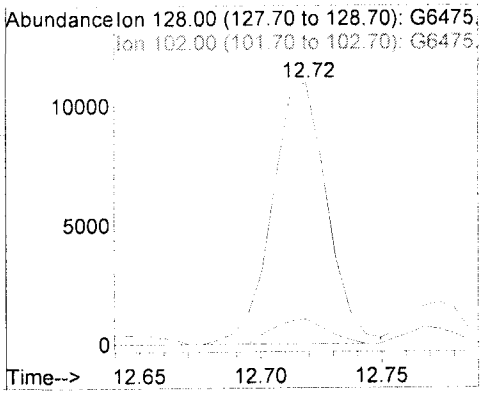




#84
C314 Naphthalene
Concen: 1.65 ug/L
RT: 12.72 min Scan# 1893
Delta R.T. -0.00 min
Lab File: G6475.D
Acq: 27 Nov 2009 16:47

Tgt Ion:128 Resp: 17266

Ion	Ratio	Lower	Upper
128	100		
102	9.5	0.0	38.1



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-6 (11-12)

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Solid Laboratory ID: RSK0991-07RE1 File ID: G6509.D

Sampled: 11/18/09 11:15 Prepared: 11/27/09 09:00 Analyzed: 11/30/09 13:25

Solids: 72.28 Preparation: Methanol Prep Initial/Final: 5.14 g / 500 mL

Batch: 9K27033 Sequence: RK93007 Calibration: R9K1805 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg)	Q
71-55-6	1,1,1-Trichloroethane	50	6700	UD
79-34-5	1,1,2,2-Tetrachloroethane	50	6700	UD
79-00-5	1,1,2-Trichloroethane	50	6700	UD
76-13-1	1,1,2-Trichlorotrifluoroethane	50	6700	UD
75-34-3	1,1-Dichloroethane	50	6700	UD
75-35-4	1,1-Dichloroethene	50	6700	UD
120-82-1	1,2,4-Trichlorobenzene	50	6700	UD
96-12-8	1,2-Dibromo-3-chloropropane	50	6700	UD
106-93-4	1,2-Dibromoethane (EDB)	50	6700	UD
95-50-1	1,2-Dichlorobenzene	50	6700	UD
107-06-2	1,2-Dichloroethane	50	6700	UD
78-87-5	1,2-Dichloropropane	50	6700	UD
541-73-1	1,3-Dichlorobenzene	50	6700	UD
106-46-7	1,4-Dichlorobenzene	50	6700	UD
78-93-3	2-Butanone (MEK)	50	34000	UD
591-78-6	2-Hexanone	50	34000	UD
108-10-1	4-Methyl-2-pentanone (MIBK)	50	34000	UD
67-64-1	Acetone	50	34000	UD
71-43-2	Benzene	50	6700	UD
75-27-4	Bromodichloromethane	50	6700	UD
75-25-2	Bromoform	50	6700	UD
74-83-9	Bromomethane	50	6700	UD
75-15-0	Carbon disulfide	50	6700	UD
56-23-5	Carbon Tetrachloride	50	6700	UD
108-90-7	Chlorobenzene	50	6700	UD
124-48-1	Chlorodibromomethane	50	6700	UD
75-00-3	Chloroethane	50	6700	UD
67-66-3	Chloroform	50	6700	UD
74-87-3	Chloromethane	50	6700	UD
156-59-2	cis-1,2-Dichloroethene	50	6700	UD
10061-01-5	cis-1,3-Dichloropropene	50	6700	UD
110-82-7	Cyclohexane	50	6700	UD
75-71-8	Dichlorodifluoromethane	50	6700	UD
100-41-4	Ethylbenzene	50	5000	JD
98-82-8	Isopropylbenzene	50	6700	UD
79-20-9	Methyl Acetate	50	6700	UD
1634-04-4	Methyl tert-Butyl Ether	50	6700	UD
108-87-2	Methylcyclohexane	50	6700	UD
75-09-2	Methylene Chloride	50	6700	UD

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

GW-6 (11-12)

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Solid	Laboratory ID:	RSK0991-07RE1	File ID:	G6509.D
Sampled:	11/18/09 11:15	Prepared:	11/27/09 09:00	Analyzed:	11/30/09 13:25
Solids:	72.28	Preparation:	Methanol Prep	Initial/Final:	5.14 g / 500 mL
Batch:	9K27033	Sequence:	RK93007	Calibration:	R9K1805
Instrument:	HP5973G				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg)	Q
100-42-5	Styrene	50	6700	UD
127-18-4	Tetrachloroethene	50	290000	D
108-88-3	Toluene	50	13000	D
156-60-5	trans-1,2-Dichloroethene	50	6700	UD
10061-02-6	trans-1,3-Dichloropropene	50	6700	UD
79-01-6	Trichloroethene	50	4000	JD
75-69-4	Trichlorofluoromethane	50	6700	UD
75-01-4	Vinyl chloride	50	13000	UD
1330-20-7	Xylenes, total	50	15000	D

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	3360	4240	126	10 - 190	D
4-Bromofluorobenzene	3360	3900	116	10 - 190	D
Toluene-d8	3360	4310	128	10 - 190	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	149402	10.73	161666	10.73	
1,4-Difluorobenzene	313368	5.45	314266	5.45	
Chlorobenzene-d5	160034	8.33	161517	8.32	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\G\DATA\113009\G6509.D Vial: 8
Acq On : 30 Nov 2009 13:25 Operator: RJ
Sample : RSK0991-07RE1@50X Inst : HP5973G
Misc : ML Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 30 16:54:31 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 30 16:45:02 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\113009\G6503.D (30 Nov 2009 10:30)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	313368	25.00 ug/L	0.00 99.71%
43) CI20 Chlorobenzene-D5	8.33	82	160034	25.00 ug/L	0.00 99.08%
63) CI30 1,4-Dichlorobenzene-	10.73	152	149402	25.00 ug/L	0.00 92.41%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.76	111	2029	0.54 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	2.16%#	
31) CS15 1,2-Dichloroethane-D	5.06	65	2720	0.63 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery =	2.52%#	
44) CS05 Toluene-D8	6.85	98	9828	0.64 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery =	2.56%#	
62) CS10 p-Bromofluorobenzene	9.58	174	2763	0.58 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery =	2.32%#	
Target Compounds					Qvalue
2) C290 Dichlorodifluorome	0.00	85	0	N.D.	
3) C010 Chloromethane	0.00	50	0	N.D.	
4) C020 Vinyl chloride	0.00	62	0	N.D.	
5) C015 Bromomethane	0.00	94	0	N.D.	
6) C025 Chloroethane	0.00	64	0	N.D.	
7) C275 Trichlorofluoromet	0.00	101	0	N.D.	
8) C045 1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030 Methylene chloride	3.11	84	55	N.D.	
10) C040 Carbon disulfide	2.79	76	1369	N.D.	
11) C036 Acrolein	0.00	56	0	N.D.	
12) C038 Acrylonitrile	0.00	53	0	N.D.	
13) C035 Acetone	0.00	43	0	N.D.	
14) C300 Acetonitrile	0.00	41	0	N.D.	
15) C276 Iodomethane	0.00	142	0	N.D.	
16) C291 1,1,2-Trichloro-1,	0.00	101	0	N.D.	
17) C962 T-butyl Methyl Eth	0.00	73	0	N.D.	
18) C057 trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255 Methyl Acetate	0.00	43	0	N.D.	
20) C050 1,1-Dichloroethane	0.00	63	0	N.D.	
21) C125 Vinyl Acetate	0.00	43	0	N.D.	
22) C051 2,2-Dichloropropan	0.00	77	0	N.D.	
23) C056 cis-1,2-Dichloroet	0.00	96	0	N.D.	
24) C272 Tetrahydrofuran	~~4.65~~	~~42~~	~~1168~~	~~1.02 ug/L~~ #	69
25) C222 Bromochloromethane	0.00	128	0	N.D.	
27) C060 Chloroform	4.60	83	311	N.D.	
28) C115 1,1,1-Trichloroeth	0.00	97	0	N.D.	
29) C120 Carbon tetrachlori	0.00	117	0	N.D.	
30) C116 1,1-Dichloropropen	0.00	75	0	N.D.	
32) C165 Benzene	0.00	78	0	N.D.	
33) C065 1,2-Dichloroethane	0.00	62	0	N.D.	
34) C110 2-Butanone	0.00	43	0	N.D.	
35) C256 Cyclohexane	0.00	56	0	N.D.	
36) C150 Trichloroethene	5.68	95	3158	0.60 ug/L	96
37) C140 1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278 Dibromomethane	0.00	93	0	N.D.	

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\G\DATA\113009\G6509.D Vial: 8
Acq On : 30 Nov 2009 13:25 Operator: RJ
Sample : RSK0991-07RE1@50X Inst : HP5973G
Misc : ML Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 30 16:54:31 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 30 16:45:02 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\113009\G6503.D (30 Nov 2009 10:30)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.92	92	25688	1.88 ug/L	93
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroethan	7.45	83	3719	1.12 ug/L #	34
49) C210	4-Methyl-2-pentano	6.92	43	129	N.D.	
50) C220	Tetrachloroethene	7.45	166	253363	43.14 ug/L	98
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	8.45	91	19802	0.75 ug/L	93
58) C246	m,p-Xylene	8.57	106	23000	2.25 ug/L	100
59) C247	o-Xylene	9.00	106	3650	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	0.00	91	0	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	10.37	105	132	N.D.	
75) C308	sec-Butylbenzene	10.37	105	132	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	12.51	180	82	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	12.71	128	1061	N.D.	
85) C934	1,2,3-Trichloroben	12.92	180	195	N.D.	

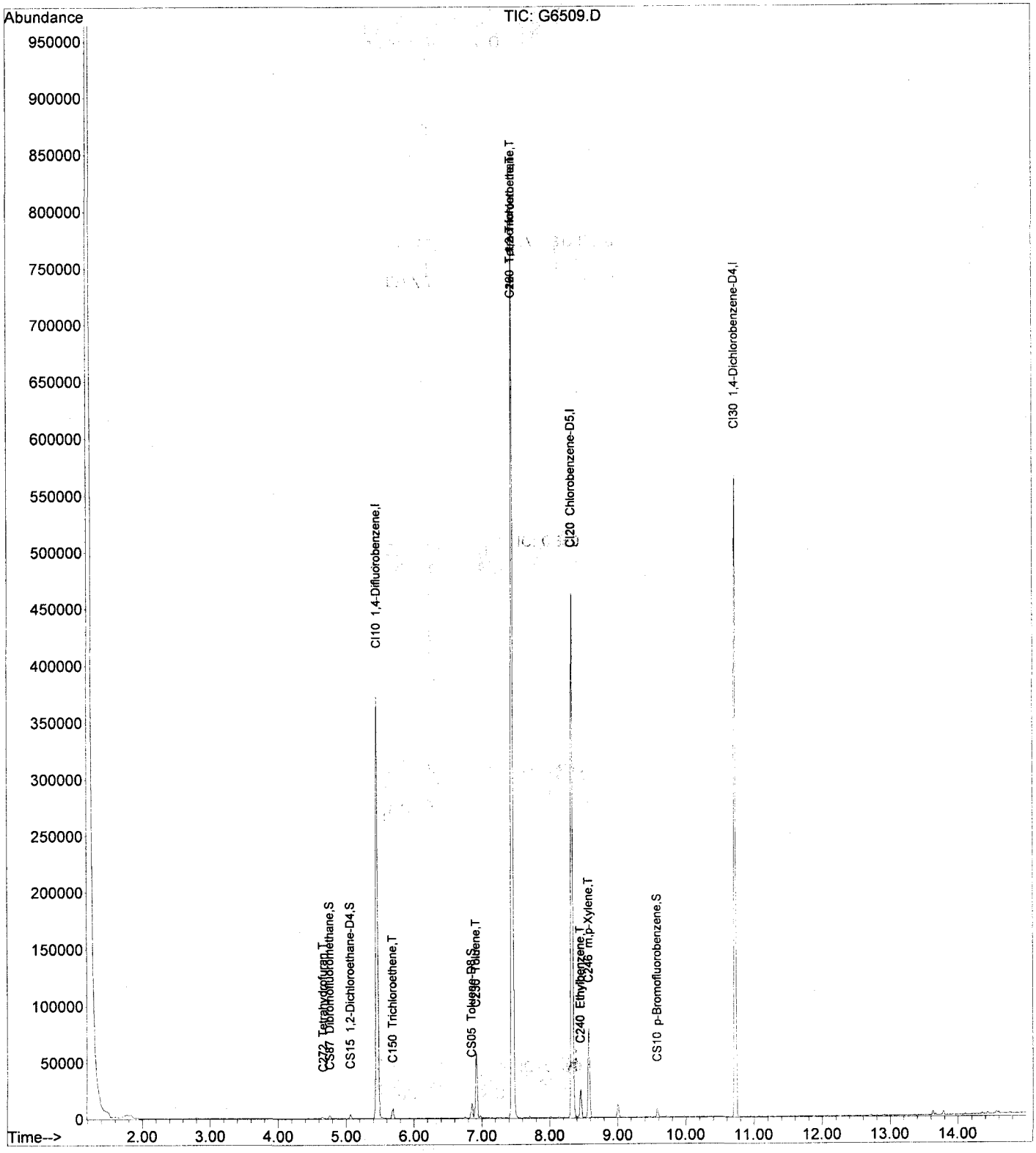
(#) = qualifier out of range (m) = manual integration (+) = signals summed

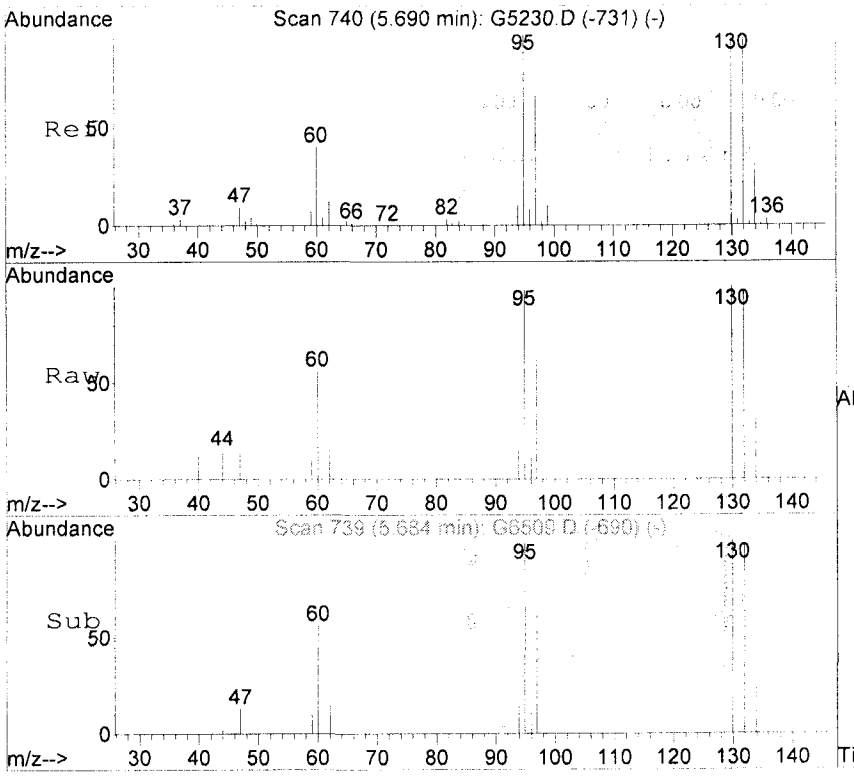
1/12/10

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\G\DATA\113009\G6509.D Vial: 8
Acq On : 30 Nov 2009 13:25 Operator: RJ
Sample : RSK0991-07RE1@50X Inst : HP5973G
Misc : ML Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 30 16:54:31 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 30 16:45:02 2009
Response via : Initial Calibration
DataAcq Meth : VOA

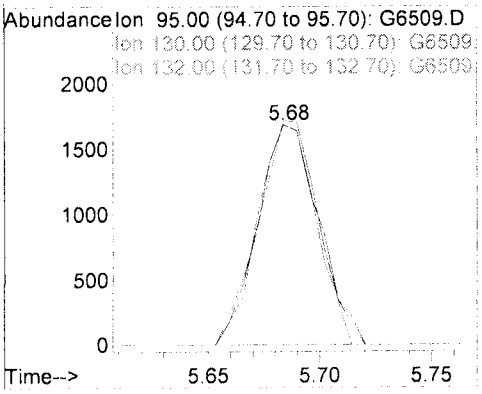


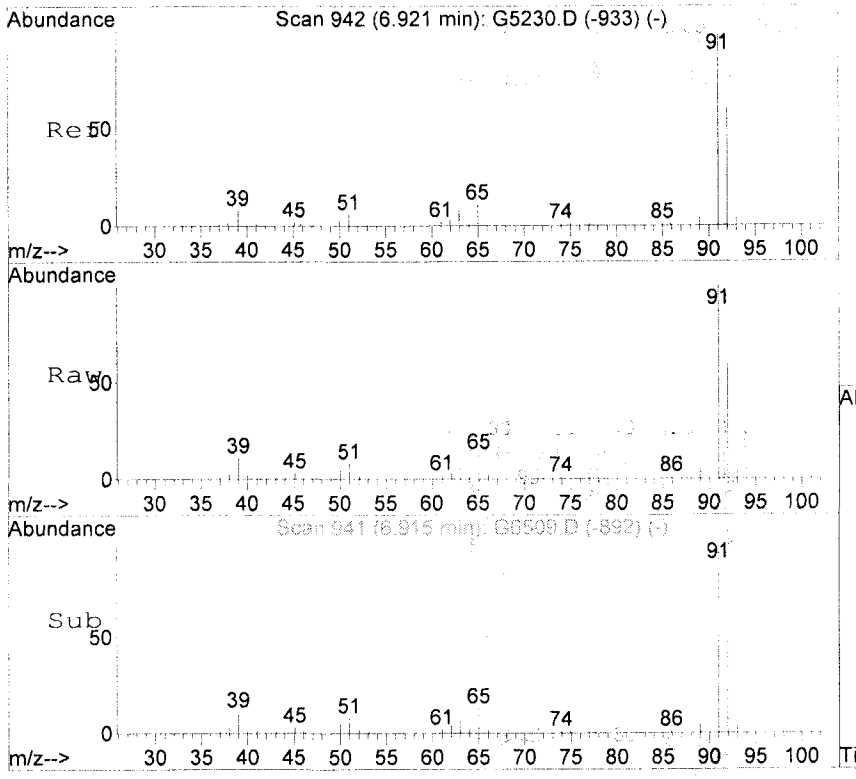


#36
C150 Trichloroethene
Concen: 0.60 ug/L
RT: 5.68 min Scan# 739
Delta R.T. 0.00 min
Lab File: G6509.D
Acq: 30 Nov 2009 13:25

Tgt Ion: 95 Resp: 3158

Ion	Ratio	Lower	Upper
95	100		
130	102.0	77.6	137.6
132	99.9	72.8	132.8

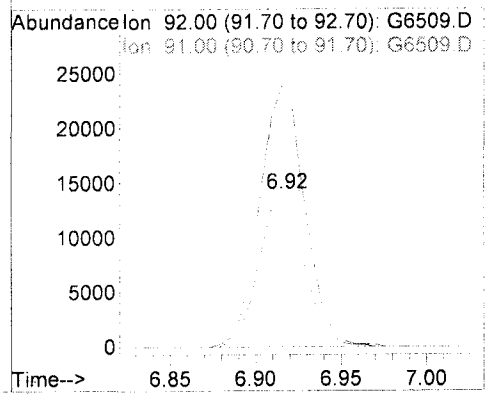


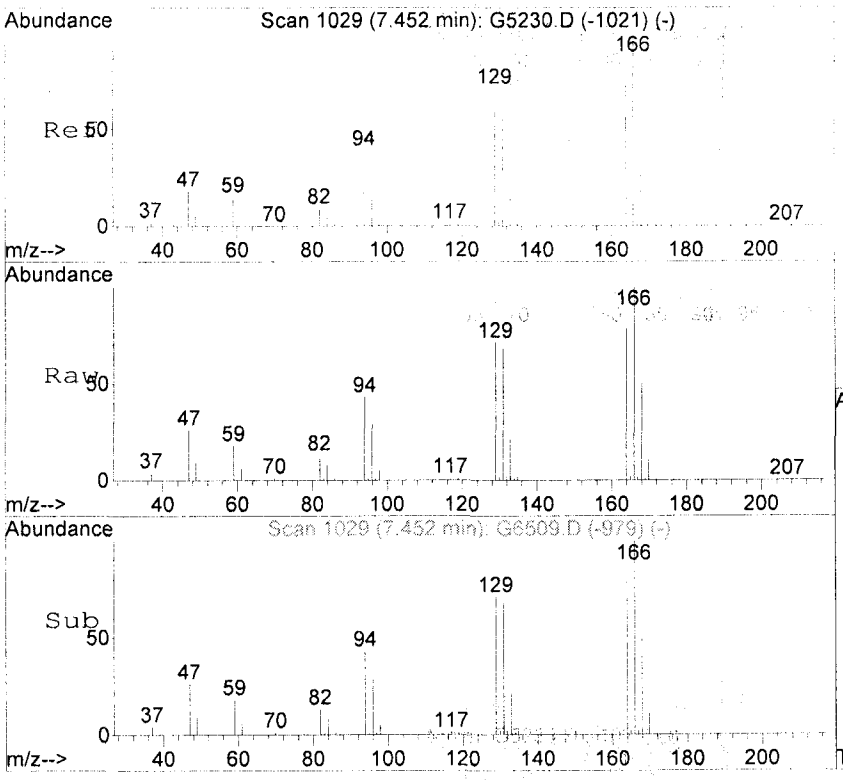


#45
C230 Toluene
Concen: 1.88 ug/L
RT: 6.92 min Scan# 941
Delta R.T. 0.00 min
Lab File: G6509.D
Acq: 30 Nov 2009 13:25

Tgt Ion: 92 Resp: 25688

Ion	Ratio	Lower	Upper
92	100		
91	170.0	131.1	191.1

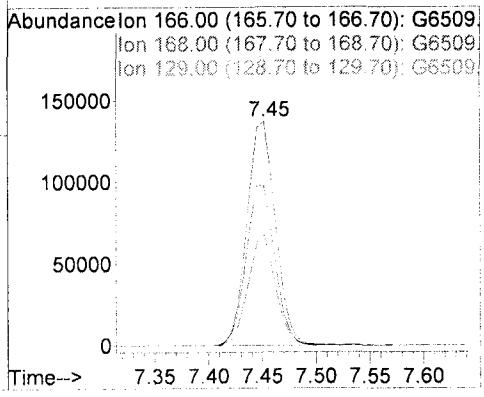


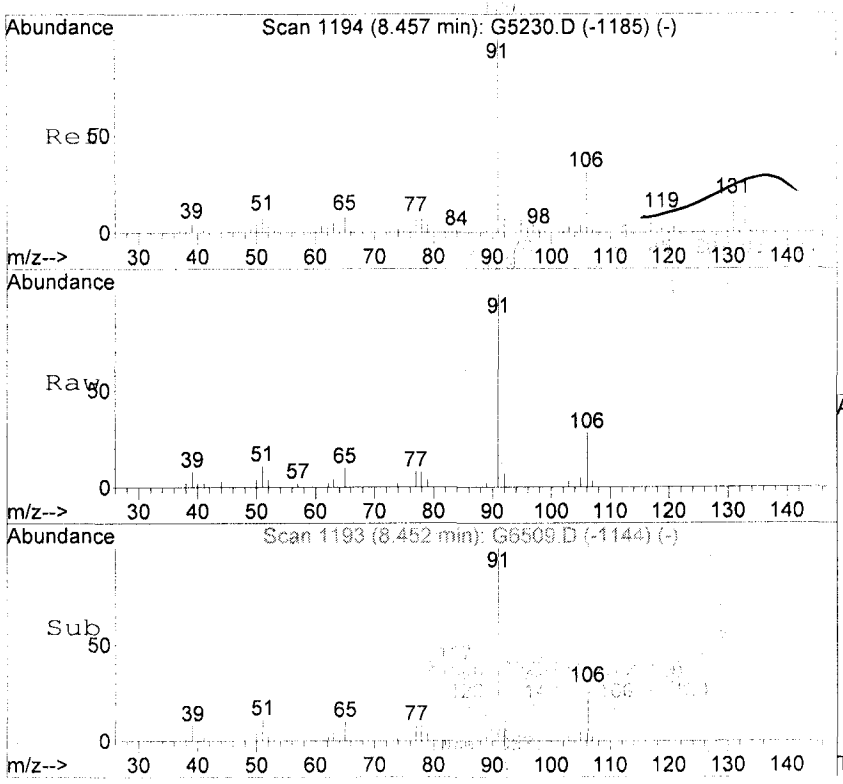


#50
C220 Tetrachloroethene
Concen: 43.14 ug/L
RT: 7.45 min Scan# 1029
Delta R.T. 0.01 min
Lab File: G6509.D
Acq: 30 Nov 2009 13:25

Tgt Ion:166 Resp: 253363

Ion	Ratio	Lower	Upper
166	100		
168	49.5	18.6	78.6
129	71.1	39.3	99.3

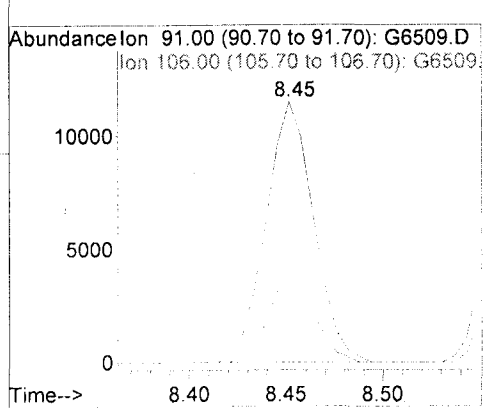


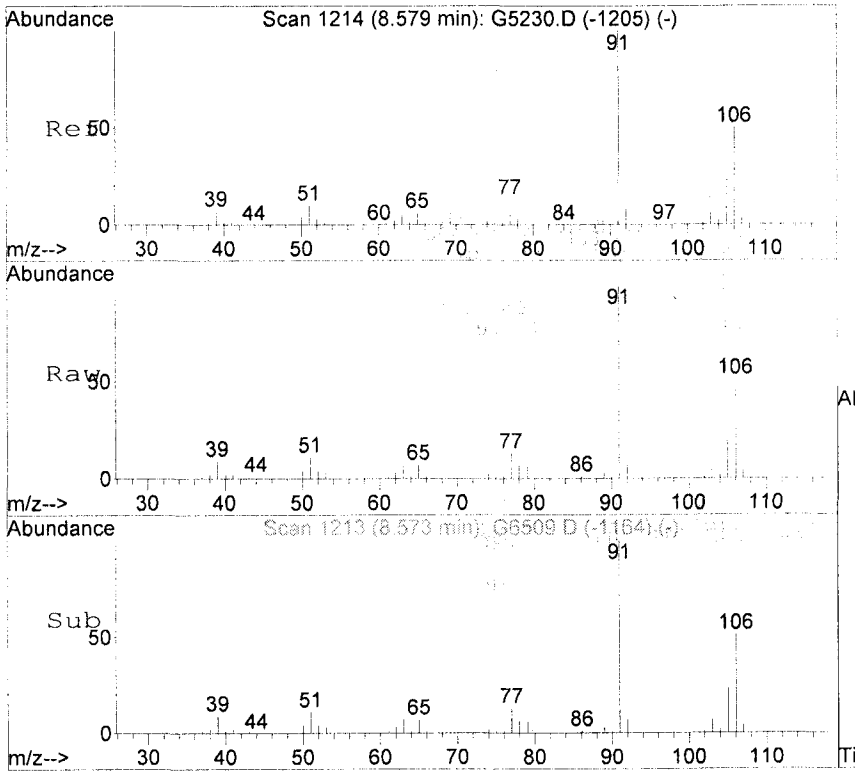


#57
C240 Ethylbenzene
Concen: 0.75 ug/L
RT: 8.45 min Scan# 1193
Delta R.T. 0.00 min
Lab File: G6509.D
Acq: 30 Nov 2009 13:25

Tgt Ion: 91 Resp: 19802

Ion	Ratio	Lower	Upper
91	100		
106	27.9	1.6	61.6

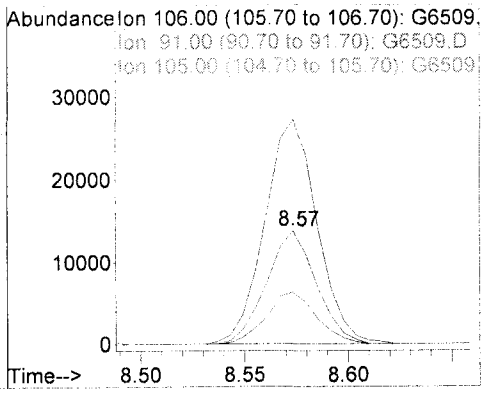




#58
C246 m,p-Xylene
Concen: 2.25 ug/L
RT: 8.57 min Scan# 1213
Delta R.T. 0.00 min
Lab File: G6509.D
Acq: 30 Nov 2009 13:25

Tgt Ion:106 Resp: 23000

Ion	Ratio	Lower	Upper
106	100		
91	197.4	167.2	227.2
105	45.5	15.1	75.1



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

TRIP BLANK

Laboratory:	TestAmerica Buffalo		SDG:		
Client:	ARCADIS U.S., Inc. - Albany, NY		Project:	Arcadis G&M, Inc. - NY9A8463.4	
Matrix:	Water	Laboratory ID:	RSK0991-08	File ID:	S1124.D
Sampled:	11/19/09 00:00	Prepared:	11/24/09 08:00	Analyzed:	11/24/09 20:21
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	2.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

TRIP BLANK

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	RSK0991-08	File ID:	S1124.D
Sampled:	11/19/09 00:00	Prepared:	11/24/09 08:00	Analyzed:	11/24/09 20:21
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9K24017	Sequence:	RK92405	Calibration:	R9K2009
Instrument:	HP5973S				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.8	95	66 - 137	
4-Bromofluorobenzene	25.0	24.5	98	73 - 120	
Toluene-d8	25.0	23.7	95	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	186517	9.05	221647	9.05	
1,4-Difluorobenzene	374568	4.99	401345	4.99	
Chlorobenzene-d5	200881	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1124.D Vial: 27
Acq On : 24 Nov 2009 20:21 Operator: DHC
Sample : RSK0991-08 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:59 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

11/25/09

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	374568	25.00	ug/L	0.00 93.33%
43) CI20	Chlorobenzene-D5	7.19	82	200881	25.00	ug/L	0.00 90.48%
63) CI30	1,4-Dichlorobenzene-	9.05	152	186517	25.00	ug/L	0.00 84.15%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	97135	23.98	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	95.92%		
31) CS15	1,2-Dichloroethane-D	4.69	65	126667	23.82	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	95.28%		
44) CS05	Toluene-D8	6.07	98	421829	23.74	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	94.96%		
62) CS10	p-Bromofluorobenzene	8.12	174	131754	24.49	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	97.96%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.		
3) C010	Chloromethane	0.00	50	0	N.D.		
4) C020	Vinyl chloride	1.53	62	159	N.D.		
5) C015	Bromomethane	0.00	94	0	N.D.		
6) C025	Chloroethane	~~1.86~~	~~64~~	~~20140~~	~~24.54~~	~~ug/L~~	51
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.		
9) C030	Methylene chloride	0.00	84	0	N.D.		
10) C040	Carbon disulfide	2.77	76	817	N.D.		
11) C036	Acrolein	0.00	56	0	N.D.		
12) C038	Acrylonitrile	0.00	53	0	N.D.		
13) C035	Acetone	0.00	43	0	N.D.		
14) C300	Acetonitrile	0.00	41	0	N.D.		
15) C276	Iodomethane	0.00	142	0	N.D.		
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.		
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.		
19) C255	Methyl Acetate	0.00	43	0	N.D.		
20) C050	1,1-Dichloroethane	3.60	63	2002	N.D.		
21) C125	Vinyl Acetate	0.00	43	0	N.D.		
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.		
23) C056	cis-1,2-Dichloroet	4.07	96	1832	N.D.		
24) C272	Tetrahydrofuran	4.33	42	278	N.D.		
25) C222	Bromochloromethane	0.00	128	0	N.D.		
27) C060	Chloroform	0.00	83	0	N.D.		
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.		
29) C120	Carbon tetrachlori	0.00	117	0	N.D.		
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.		
32) C165	Benzene	0.00	78	0	N.D.		
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.		
34) C110	2-Butanone	0.00	43	0	N.D.		
35) C256	Cyclohexane	0.00	56	0	N.D.		
36) C150	Trichloroethene	5.18	95	736	N.D.		
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

11/25/09

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1124.D Vial: 27
Acq On : 24 Nov 2009 20:21 Operator: DHC
Sample : RSK0991-08 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 09:33:59 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	137	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1569	N.D.	
50) C220	Tetrachloroethene	6.53	166	1110	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.19	91	427	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.12	91	145	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	0.00	128	0	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

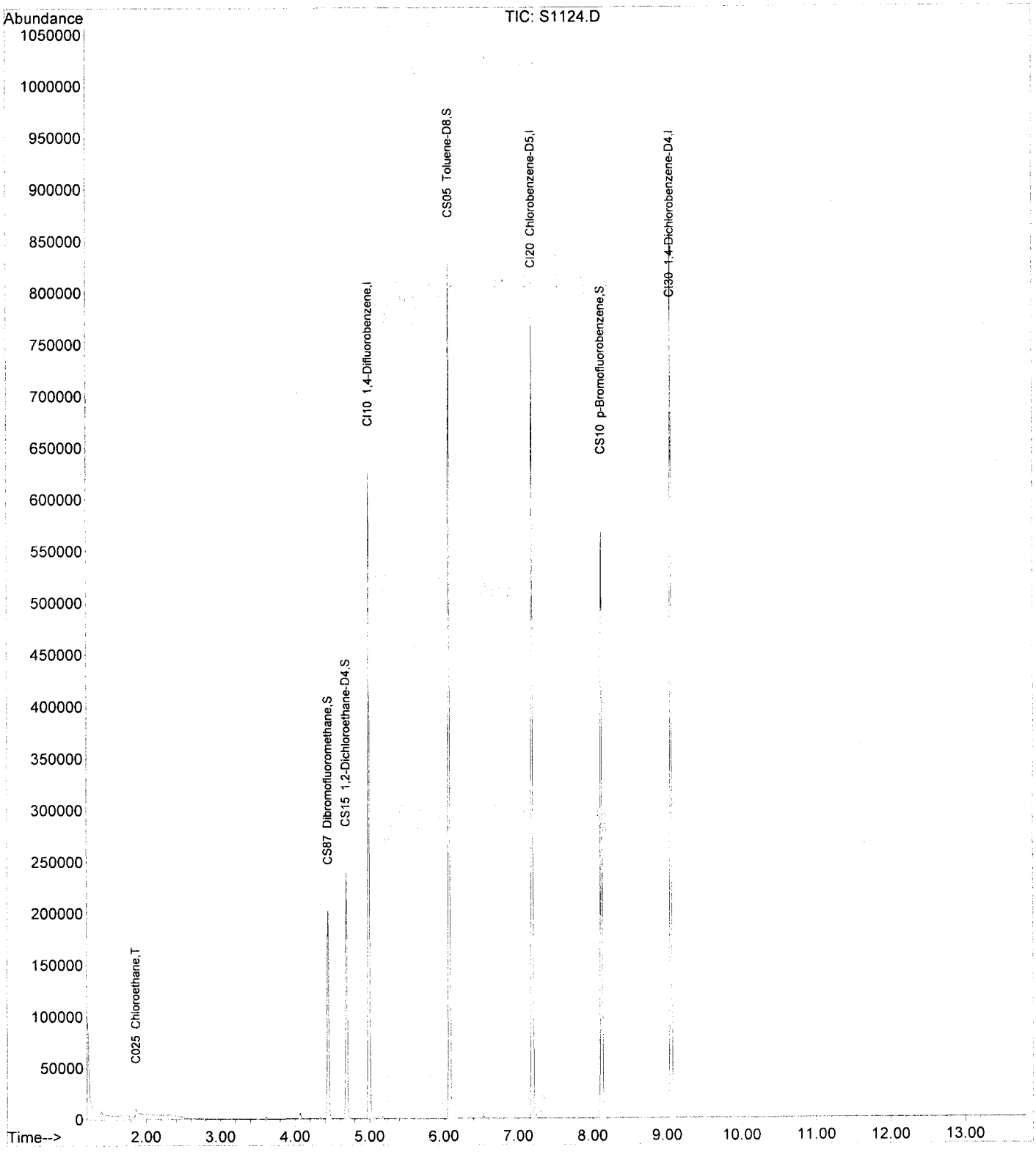
11/26/10

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112409\S1124.D
Acq On : 24 Nov 2009 20:21
Sample : RSK0991-08
Misc :
MS Integration Params: RTEINT.P

Vial: 27
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 09:33:59 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 09:32:54 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 6

INITIAL CALIBRATION DATA

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9K1805

SDG:

Project: Arcadis G&M, Inc. - NY9A8463.4

Instrument: HP5973G

Calibration Date: 11/18/09 13:08

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1-Trichloroethane	1	0.6949505	5	0.5879007	10	0.5794197	25	0.6214952	50	0.6284785	100	0.60904
1,1,2,2-Tetrachloroethane	1	0.8468213	5	0.7521589	10	0.7586337	25	0.8079041	50	0.835483	100	0.8476654
1,1,2-Trichloroethane	1	0.5607844	5	0.4963751	10	0.4965124	25	0.5178752	50	0.5208503	100	0.5166251
1,1,2-Trichlorotrifluoroethane	1	0.2657904	5	0.234525	10	0.2228982	25	0.2459304	50	0.2415623	100	0.2406478
1,1-Dichloroethane	1	0.8675032	5	0.7394093	10	0.7241822	25	0.7653766	50	0.7787801	100	0.7584346
1,1-Dichloroethene	1	0.4299747	5	0.3291926	10	0.3248047	25	0.3371335	50	0.3395887	100	0.3351112
1,2,4-Trichlorobenzene	1	1.038538	5	0.9472307	10	0.9563342	25	1.047014	50	1.064812	100	0.9789094
1,2-Dibromo-3-chloropropane	1	0.1136259	5	0.1127394	10	0.1073859	25	0.1183551	50	0.1224346	100	0.1305806
1,2-Dibromoethane (EDB)	1	0.6410808	5	0.6044185	10	0.5958122	25	0.6308539	50	0.6334956	100	0.6394846
1,2-Dichlorobenzene	1	1.84395	5	1.696633	10	1.683668	25	1.771151	50	1.755985	100	1.705263
1,2-Dichloroethane	1	0.5957142	5	0.5244184	10	0.5045915	25	0.5447765	50	0.551196	100	0.5412502
1,2-Dichloroethane-d4	1	0.3769499	5	0.3931369	10	0.2879923	25	0.3317998	50	0.32559	100	0.3420137
1,2-Dichloropropane	1	0.4387875	5	0.3866544	10	0.3826183	25	0.4107495	50	0.4058148	100	0.3971226
1,3-Dichlorobenzene	1	1.989529	5	1.78687	10	1.82818	25	1.886455	50	1.861996	100	1.773201
1,4-Dichlorobenzene	1	2.09599	5	1.830891	10	1.879156	25	1.939564	50	1.933649	100	1.888944
2-Butanone (MEK)	5	0.2140542	25	0.151292	50	0.1372346	125	0.134807	250	0.1328142	500	0.1329037
2-Hexanone	5	0.5485105	25	0.48133	50	0.4587085	125	0.4737415	250	0.4684584	500	0.45458
4-Bromofluorobenzene	1	0.8101334	5	0.8422713	10	0.6240951	25	0.7446883	50	0.7237991	100	0.7573889
4-Methyl-2-pentanone (MIBK)	5	0.7865607	25	0.6955551	50	0.6633468	125	0.6698376	250	0.6524441	500	0.6303585
Acetone	5	0.1436557	25	0.1045083	50	0.0902927	125	0.0899417	250	9.051427E-02	500	8.931727E-02
Benzene	1	1.920075	5	1.624696	10	1.600186	25	1.684273	50	1.68361	100	1.606101
Bromodichloromethane	1	0.4922566	5	0.449617	10	0.4506635	25	0.5052044	50	0.5208423	100	0.5203151
Bromoform	1	0.3177443	5	0.3286858	10	0.3410504	25	0.3954254	50	0.4364604	100	0.4589742
Bromomethane	1	0.1818098	5	0.1195725	10	9.716041E-02	25	9.846653E-02	50	0.0952152	100	9.095025E-02
Carbon disulfide	1	0.9604447	5	0.728581	10	0.7041962	25	0.7560101	50	0.7660149	100	0.787725
Carbon Tetrachloride	1	0.5570564	5	0.4728183	10	0.4756914	25	0.5202592	50	0.5335925	100	0.5254996
Chlorobenzene	1	2.611784	5	2.291323	10	2.29256	25	2.421395	50	2.371421	100	2.302351
Chlorodibromomethane	1	0.6435184	5	0.5969662	10	0.6056076	25	0.6933061	50	0.7222747	100	0.7445644
Chloroethane	1	0.2791947	5	0.2316808	10	0.1988518	25	0.2182891	50	0.2093699	100	0.2102694
Chloroform	1	0.8647631	5	0.7220119	10	0.6926066	25	0.7379699	50	0.7494072	100	0.7246995
Chloromethane	1	0.4600418	5	0.3795655	10	0.3311776	25	0.3630875	50	0.3525697	100	0.3426436
cis-1,2-Dichloroethene	1	0.5333582	5	0.4566192	10	0.4387109	25	0.4631347	50	0.4697023	100	0.4524067
cis-1,3-Dichloropropene	1	0.5929	5	0.551821	10	0.5679041	25	0.6207062	50	0.6218261	100	0.6044442
Cyclohexane	1	0.6803613	5	0.5552139	10	0.5415586	25	0.5791323	50	0.5690291	100	0.5515685
Dichlorodifluoromethane	1	0.3462903	5	0.3376242	10	0.2989567	25	0.3457271	50	0.3348214	100	0.3289213
Ethylbenzene	1	4.559546	5	3.958262	10	4.021722	25	4.241488	50	4.066182	100	3.819181
Isopropylbenzene	1	4.5085	5	3.923237	10	4.075092	25	4.324357	50	4.335685	100	4.291735
Methyl Acetate	1	0.5934184	5	0.4360889	10	0.3725211	25	0.3780357	50	0.3852279	100	0.382811
Methyl tert-Butyl Ether	1	0.9979916	5	0.8602956	10	0.8383506	25	0.8709521	50	0.8894625	100	0.8887486
Methylcyclohexane	1	0.7147978	5	0.600447	10	0.5914127	25	0.6419929	50	0.6370747	100	0.6168481
Methylene Chloride	1	0.6297063	5	0.435959	10	0.4071622	25	0.4066606	50	0.413784	100	0.4008928
Styrene	1	1.983608	5	1.934966	10	1.999397	25	2.223433	50	2.23297	100	2.168124
Tetrachloroethene	1	1.010157	5	0.8517483	10	0.8762197	25	0.9430668	50	0.916316	100	0.9075227
Toluene	1	2.42108	5	2.011654	10	2.075164	25	2.161478	50	2.103359	100	2.066743

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9K1805

SDG:

Project: Arcadis G&M, Inc. - NY9A8463.4

Instrument: HP5973G

Calibration Date: 11/18/09 13:08

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Toluene-d8	1	2.559018	5	2.66745	10	2.030438	25	2.408998	50	2.247728	100	2.368824
trans-1,2-Dichloroethene	1	0.4945524	5	0.413956	10	0.4047891	25	0.4261774	50	0.4253949	100	0.4064595
trans-1,3-Dichloropropene	1	0.9122246	5	0.9238803	10	0.9765018	25	1.106331	50	1.123679	100	1.141652
Trichloroethene	1	0.4783339	5	0.3974393	10	0.3907055	25	0.4217527	50	0.4231711	100	0.4168731
Trichlorofluoromethane	1	0.560389	5	0.5519221	10	0.5056066	25	0.5707039	50	0.5507057	100	0.5427457
Vinyl chloride	1	0.4261978	5	0.3697624	10	0.3242333	25	0.362072	50	0.3515766	100	0.3449069
Xylenes, total	3	1.73598	15	1.554218	30	1.554589	75	1.630185	150	1.577542	300	1.496306

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9K1805

SDG:

Project: Arcadis G&M, Inc. - NY9A8463.4

Instrument: HP5973G

Calibration Date: 11/18/09 13:08

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r^2	Quad COD	LIMIT	Q
1,1,1-Trichloroethane	0.6202141	6.643444	4.721666	8.765011E-02			15	
1,1,2,2-Tetrachloroethane	0.8081111	5.362878	9.78	1.957201E-02			SPCC (0.3)	
1,1,2-Trichloroethane	0.5181704	4.542108	7.378333	5.460098E-02			15	
1,1,2-Trichlorotrifluoroethane	0.2418924	5.858528	2.616667	0.1974528			15	
1,1-Dichloroethane	0.772281	6.536944	3.74	1.479661E-02			SPCC (0.1)	
1,1-Dichloroethene	0.3493009	11.42019	2.595	0.2101819			CCC (30)	
1,2,4-Trichlorobenzene	1.005473	5.042408	12.51	9.120699E-03			15	
1,2-Dibromo-3-chloropropane	0.1175203	6.976982	11.82167	0.0280438			15	
1,2-Dibromoethane (EDB)	0.6241909	3.078671	7.873333	6.493114E-02			15	
1,2-Dichlorobenzene	1.742775	3.466244	11.1	1.307304E-02			15	
1,2-Dichloroethane	0.5436578	5.621481	5.131667	7.776715E-02			15	
1,2-Dichloroethane-d4	0.3429138	11.00576	5.06	7.727578E-03			15	
1,2-Dichloropropane	0.4036245	5.033181	5.92	1.917853E-02			CCC (30)	
1,3-Dichlorobenzene	1.854372	4.258933	10.66	7.135707E-03			15	
1,4-Dichlorobenzene	1.928032	4.738179	10.74167	3.815623E-02			15	
2-Butanone (MEK)	0.1505176	21.18597	4.34	0.4121774	0.99993		0.99	
2-Hexanone	0.4808882	7.181076	7.615	7.276657E-02			15	
4-Bromofluorobenzene	0.750396	10.10523	9.58	1.043714E-02			15	
4-Methyl-2-pentanone (MIBK)	0.6830171	8.058289	6.775	0.1243446			15	
Acetone	0.1013717	21.22333	2.726667	0.5987487	0.99990		0.99	
Benzene	1.68649	7.130402	5.07	2.059171E-02			15	
Bromodichloromethane	0.4898165	6.637156	6.21	2.299345E-02			15	
Bromoform	0.3797234	15.66351	9.27	1.389425E-02	0.99839		SPCC (0.1)	
Bromomethane	0.1138624	30.52009	1.783333	0.2892545	0.99925		0.99	
Carbon disulfide	0.7838286	11.65002	2.786667	0.1846083			15	
Carbon Tetrachloride	0.5141529	6.493022	4.861667	8.576904E-02			15	
Chlorobenzene	2.381806	5.211209	8.351667	4.497736E-02			SPCC (0.3)	
Chlorodibromomethane	0.6677062	9.228758	7.77	1.784319E-02			15	
Chloroethane	0.2246093	12.85876	1.878333	0.4008497			15	
Chloroform	0.7485764	8.019865	4.6	2.027401E-02			CCC (30)	
Chloromethane	0.3715143	12.50543	1.406667	0.580441			SPCC (0.1)	
cis-1,2-Dichloroethene	0.4689887	7.08659	4.29	2.204579E-02			15	
cis-1,3-Dichloropropene	0.5932669	4.800015	6.62	1.102654E-02			15	
Cyclohexane	0.5794773	8.830519	4.731667	8.590164E-02			15	
Dichlorodifluoromethane	0.3320568	5.27415	1.275	0.4294991			15	
Ethylbenzene	4.111063	6.312097	8.45	8.586435E-03			CCC (30)	
Isopropylbenzene	4.243101	4.926887	9.38	2.144103E-02			15	
Methyl Acetate	0.4246838	20.20336	3.01	0.4199844	0.99993		0.99	
Methyl tert-Butyl Ether	0.8909668	6.263488	3.33	0.3800564			15	
Methylcyclohexane	0.6337622	6.998016	5.81	1.140391E-02			15	
Methylene Chloride	0.4490275	19.89986	3.095	0.1774934	0.99982		0.99	
Styrene	2.090416	6.343126	9.02	2.202767E-02			15	
Tetrachloroethene	0.9175051	6.042331	7.45	1.781947E-02			15	
Toluene	2.139913	6.831445	6.92	1.640706E-02			CCC (30)	
Toluene-d8	2.380409	9.493222	6.85	2.203062E-02			15	
trans-1,2-Dichloroethene	0.4285549	7.83521	3.326667	0.1559112			15	
trans-1,3-Dichloropropene	1.030711	10.18112	7.19	1.750117E-02			15	
Trichloroethene	0.4213793	7.33878	5.68	1.027446E-02			15	
Trichlorofluoromethane	0.5470122	4.096457	2.083333	0.2484081			15	
Vinyl chloride	0.3631248	9.540622	1.513333	0.3408792			CCC (30)	

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Calibration:	R9K1805	Instrument:	HP5973G
		Calibration Date:	11/18/09 13:08

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r^2	Quad COD	LIMIT	Q
Xylenes, total	1.59147	5.210388	9	0			15	

Response Factor Report HP5973G

Method Path : D:\MSDCHEM\G\METHODS\8260-5MLLOW\
Method File : R9K1805-SIXPT.M
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:13:05 2009
Response Via : Initial Calibration

R9K1805
8260 G
11/19

Calibration Files
1 =G6183.D 2 =G6184.D 3 =G6185.D
4 =G6186.D 5 =G6187.D 6 =G6188.D

			Compound	1	2	3	4	5	6	Avg	%RSD
1)	I	CI10	1,4-Difluoroben	ISTD							
2)	T	C290	Dichlorodiflu	0.346	0.338	0.299	0.346	0.335	0.329	0.332	5.27
3)	T	C010	Chloromethane	0.460	0.380	0.331	0.363	0.353	0.343	0.372	12.51
4)	T	C020	Vinyl chlorid	0.426	0.370	0.324	0.362	0.352	0.345	0.363	9.54
5)	T	C015	Bromomethane	0.182	0.120	0.097	0.098	0.095	0.091	-----	
								LO M= 0.092 R=0.999			
6)	T	C025	Chloroethane	0.279	0.232	0.199	0.218	0.209	0.210	0.225	12.86
7)	T	C275	Trichlorofluo	0.560	0.552	0.506	0.571	0.551	0.543	0.547	4.10
8)	T	C045	1,1-Dichloroe	0.430	0.329	0.325	0.337	0.340	0.335	0.349	11.42
9)	T	C030	Methylene chl	0.630	0.436	0.407	0.407	0.414	0.401	-----	
								LO M= 0.404 R=1.000			
10)	T	C040	Carbon disulf	0.960	0.729	0.704	0.756	0.766	0.788	0.784	11.65
11)	T	C036	Acrolein	0.014	0.011	0.010	0.010	0.011	0.011	0.011	10.68
12)	T	C038	Acrylonitrile	0.120	0.102	0.093	0.094	0.097	0.096	0.100	10.20
13)	T	C035	Acetone	0.144	0.105	0.090	0.090	0.091	0.089	-----	
								LO M= 0.090 R=1.000			
14)	T	C300	Acetonitrile	0.044	0.036	0.034	0.033	0.033	0.032	0.035	12.96
15)	T	C276	Iodomethane	0.564	0.488	0.470	0.495	0.498	0.502	0.503	6.41
16)	T	C291	1,1,2-Trichlo	0.266	0.235	0.223	0.246	0.242	0.241	0.242	5.86
17)	T	C962	T-butyl Methy	0.998	0.860	0.838	0.871	0.889	0.889	0.891	6.26
18)	T	C057	trans-1,2-Dic	0.495	0.414	0.405	0.426	0.425	0.406	0.429	7.84
19)	T	C255	Methyl Acetat	0.593	0.436	0.373	0.378	0.385	0.383	-----	
								LO M= 0.383 R=1.000			
20)	T	C050	1,1-Dichloroe	0.868	0.739	0.724	0.765	0.779	0.758	0.772	6.54
21)	T	C125	Vinyl Acetate	0.590	0.537	0.531	0.564	0.561	0.552	0.556	3.79
22)	T	C051	2,2-Dichlorop	0.515	0.444	0.449	0.479	0.480	0.458	0.471	5.62
23)	T	C056	cis-1,2-Dichl	0.533	0.457	0.439	0.463	0.470	0.452	0.469	7.09
24)	T	C272	Tetrahydrofur	0.135	0.100	0.090	0.091	0.091	0.091	-----	
								LO M= 0.091 R=1.000			
25)	T	C222	Bromochlorome	0.230	0.213	0.193	0.208	0.214	0.205	0.210	5.67
26)	S	CS87	Dibromofluoro	0.324	0.343	0.247	0.292	0.287	0.299	0.299	11.06
27)	T	C060	Chloroform	0.865	0.722	0.693	0.738	0.749	0.725	0.749	8.02
28)	T	C115	1,1,1-Trichlo	0.695	0.588	0.579	0.621	0.628	0.609	0.620	6.64
29)	T	C120	Carbon tetrac	0.557	0.473	0.476	0.520	0.534	0.525	0.514	6.49
30)	T	C116	1,1-Dichlorop	0.643	0.528	0.529	0.579	0.579	0.561	0.570	7.47
31)	S	CS15	1,2-Dichloroe	0.377	0.393	0.288	0.332	0.326	0.342	0.343	11.01
32)	T	C165	Benzene	1.920	1.625	1.600	1.684	1.684	1.606	1.686	7.13
33)	T	C065	1,2-Dichloroe	0.596	0.524	0.505	0.545	0.551	0.541	0.544	5.62
34)	T	C110	2-Butanone	0.214	0.151	0.137	0.135	0.133	0.133	-----	
								LO M= 0.133 R=1.000			
35)	T	C256	Cyclohexane	0.680	0.555	0.542	0.579	0.569	0.552	0.579	8.83
36)	T	C150	Trichloroethe	0.478	0.397	0.391	0.422	0.423	0.417	0.421	7.34
37)	T	C140	1,2-Dichlorop	0.439	0.387	0.383	0.411	0.406	0.397	0.404	5.03
38)	T	C278	Dibromomethan	0.237	0.208	0.201	0.214	0.217	0.212	0.215	5.62
39)	T	C130	Bromodichloro	0.492	0.450	0.451	0.505	0.521	0.520	0.490	6.64
40)	T	C161	2-Chloroethyl	0.023	0.023	0.034	0.042	0.043	0.054	-----	
								QO A= 0.001 R=0.999			
								B= 0.034			
41)	T	C012	Methylcyclohe	0.715	0.600	0.591	0.642	0.637	0.617	0.634	7.00
42)	T	C145	cis-1,3-Dichl	0.593	0.552	0.568	0.621	0.622	0.604	0.593	4.80
43)	I	CI20	Chlorobenzene-D	ISTD							
44)	S	CS05	Toluene-D8	2.559	2.667	2.030	2.409	2.248	2.369	2.380	9.49
45)	T	C230	Toluene	2.421	2.012	2.075	2.161	2.103	2.067	2.140	6.83
46)	T	C170	trans-1,3-Dic	0.912	0.924	0.977	1.106	1.124	1.142	1.031	10.18
47)	T	C284	Ethyl Methacr	0.731	0.747	0.764	0.860	0.879	0.888	0.812	8.83

Response Factor Report HP5973G

Method Path : D:\MSDCHEM\G\METHODS\8260-5MLLOW\
Method File : R9K1805-SIXPT.M
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:13:05 2009
Response Via : Initial Calibration

Calibration Files
1 =G6183.D 2 =G6184.D 3 =G6185.D
4 =G6186.D 5 =G6187.D 6 =G6188.D

48)	T	C160	1,1,2-Trichlo	0.561	0.496	0.497	0.518	0.521	0.517	0.518	4.54
49)	T	C210	4-Methyl-2-pe	0.787	0.696	0.663	0.670	0.652	0.630	0.683	8.06
50)	T	C220	Tetrachloroet	1.010	0.852	0.876	0.943	0.916	0.908	0.918	6.04
51)	T	C221	1,3-Dichlorop	1.229	1.130	1.137	1.190	1.179	1.170	1.172	3.10
52)	T	C155	Dibromochloro	0.644	0.597	0.606	0.693	0.722	0.745	0.668	9.23
53)	T	C163	1,2-Dibromoet	0.641	0.604	0.596	0.631	0.633	0.639	0.624	3.08
54)	T	C215	2-Hexanone	0.549	0.481	0.459	0.474	0.468	0.455	0.481	7.18
55)	T	C235	Chlorobenzene	2.612	2.291	2.293	2.421	2.371	2.302	2.382	5.21
56)	T	C281	1,1,1,2-Tetra	0.816	0.739	0.751	0.812	0.816	0.780	0.786	4.40
57)	T	C240	Ethylbenzene	4.560	3.958	4.022	4.241	4.066	3.819	4.111	6.31
58)	T	C246	m,p-Xylene	1.736	1.568	1.577	1.644	1.578	1.489	1.599	5.23
59)	T	C247	o-Xylene	1.735	1.528	1.510	1.602	1.576	1.511	1.577	5.45
60)	T	C245	Styrene	1.984	1.935	1.999	2.223	2.233	2.168	2.090	6.34
61)	T	C180	Bromoform	0.318	0.329	0.341	0.395	0.436	0.459	-----	
								LO M= 0.448 R=0.999			
62)	S	CS10	p-Bromofluoro	0.810	0.842	0.624	0.745	0.724	0.757	0.750	10.11
63)	I	CI30	1,4-Dichloroben	ISTD							
64)	T	C966	Isopropylbenz	4.508	3.923	4.075	4.324	4.336	4.292	4.243	4.93
65)	T	C301	Bromobenzene	1.056	0.942	0.960	1.030	1.058	1.071	1.020	5.43
66)	T	C225	1,1,2,2-Tetra	0.847	0.752	0.759	0.808	0.835	0.848	0.808	5.36
67)	T	C282	1,2,3-Trichlo	0.273	0.249	0.250	0.253	0.254	0.249	0.255	3.66
68)	T	C283	t-1,4-Dichlor	0.071	0.080	0.099	0.116	0.127	0.134	-----	
								LO M= 0.131 R=0.999			
69)	T	C302	n-Propylbenze	5.234	4.694	4.901	5.277	5.251	4.974	5.055	4.68
70)	T	C303	2-Chlorotolue	1.029	0.914	0.958	1.029	1.037	1.032	1.000	5.15
71)	T	C289	4-Chlorotolue	1.062	0.938	0.973	1.047	1.061	1.049	1.022	5.18
72)	T	C304	1,3,5-Trimeth	3.655	3.301	3.386	3.628	3.632	3.463	3.511	4.24
73)	T	C306	tert-Butylben	0.863	0.761	0.775	0.823	0.815	0.777	0.802	4.81
74)	T	C307	1,2,4-Trimeth	3.557	3.216	3.326	3.511	3.529	3.365	3.417	3.98
75)	T	C308	sec-Butylbenz	4.360	3.814	3.954	4.159	4.156	3.948	4.065	4.84
76)	T	C260	1,3-Dichlorob	1.990	1.787	1.828	1.886	1.862	1.773	1.854	4.26
77)	T	C309	4-Isopropylto	3.869	3.437	3.566	3.744	3.707	3.403	3.621	5.07
78)	T	C267	1,4-Dichlorob	2.096	1.831	1.879	1.940	1.934	1.889	1.928	4.74
79)	T	C249	1,2-Dichlorob	1.844	1.697	1.684	1.771	1.756	1.705	1.743	3.47
80)	T	C310	n-Butylbenzen	3.448	3.029	3.112	3.351	3.357	3.128	3.237	5.22
81)	T	C286	1,2-Dibromo-3	0.114	0.113	0.107	0.118	0.122	0.131	0.118	6.98
82)	T	C313	1,2,4-Trichlo	1.039	0.947	0.956	1.047	1.065	0.979	1.005	5.04
83)	T	C316	Hexachlorobut	0.607	0.527	0.534	0.563	0.576	0.509	0.553	6.57
84)	T	C314	Naphthalene	1.806	1.686	1.673	1.870	1.917	1.820	1.795	5.48
85)	T	C934	1,2,3-Trichlo	0.849	0.748	0.744	0.811	0.827	0.729	0.785	6.44

Total Average %RSD 6.71

L = Linear LO = Linear+Origin Q = Quad QO = Quad+Origin R = Corr. Coef
(#) = Out of Range

R9K1805-SIXPT.M Thu Nov 19 10:19:05 2009 HP5973S

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6183.D
Acq On : 18 Nov 2009 13:08
Sample : RK91820-CAL1
Misc : VSTD 001
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:10:39 2009

Vial: 3
Operator: DHC
Inst : HP5973G
Multiplr: 1.00
Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	337578	25.00 ug/L	0.00 89.98%
43) CI20 Chlorobenzene-D5	8.32	82	174354	25.00 ug/L	0.00 93.24%
63) CI30 1,4-Dichlorobenzene-	10.73	152	174476	25.00 ug/L	0.00 97.13%

System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.76	111	4372	1.08 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	4.32%#	
31) CS15 1,2-Dichloroethane-D	5.06	65	5090	1.10 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery =	4.40%#	
44) CS05 Toluene-D8	6.85	98	17847	1.08 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery =	4.32%#	
62) CS10 p-Bromofluorobenzene	9.58	174	5650	1.08 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery =	4.32%#	

Target Compounds					Qvalue
2) C290 Dichlorodifluorometh	1.28	85	4676	1.04 ug/L	100
3) C010 Chloromethane	1.41	50	6212	1.24 ug/L	96
4) C020 Vinyl chloride	1.51	62	5755	1.17 ug/L	94
5) C015 Bromomethane	1.78	94	2455	1.60 ug/L	99
6) C025 Chloroethane	1.88	64	3770	1.24 ug/L	95
7) C275 Trichlorofluorometha	2.08	101	7567m	1.02 ug/L	99
8) C045 1,1-Dichloroethene	2.60	96	5806	1.23 ug/L	87
9) C030 Methylene chloride	3.09	84	8503	1.40 ug/L	92
10) C040 Carbon disulfide	2.78	76	12969	1.23 ug/L	94
11) C036 Acrolein	2.57	56	3669	24.17 ug/L	88
12) C038 Acrylonitrile	3.39	53	8111	5.99 ug/L	94
13) C035 Acetone	2.75	43	9699	7.09 ug/L	88
14) C300 Acetonitrile	3.02	41	23841	49.93 ug/L	99
15) C276 Iodomethane	2.75	142	7620	1.12 ug/L	97
16) C291 1,1,2-Trichloro-1,2,	2.62	101	3589	1.10 ug/L	93
17) C962 T-butyl Methyl Ether	3.35	73	13476	1.12 ug/L	95
18) C057 trans-1,2-Dichloroet	3.33	96	6678	1.15 ug/L	94
19) C255 Methyl Acetate	3.03	43	8013	1.39 ug/L	92
20) C050 1,1-Dichloroethane	3.74	63	11714	1.12 ug/L	96
21) C125 Vinyl Acetate	3.80	43	39804	5.31 ug/L	99
22) C051 2,2-Dichloropropane	4.26	77	6960	1.09 ug/L	91
23) C056 cis-1,2-Dichloroethe	4.29	96	7202	1.14 ug/L	94
24) C272 Tetrahydrofuran	4.61	42	9136	6.79 ug/L	93
25) C222 Bromochloromethane	4.52	128	3102	1.09 ug/L	97
27) C060 Chloroform	4.60	83	11677	1.16 ug/L	97
28) C115 1,1,1-Trichloroethan	4.73	97	9384	1.12 ug/L	95
29) C120 Carbon tetrachloride	4.86	117	7522	1.08 ug/L	94
30) C116 1,1-Dichloropropene	4.87	75	8683	1.13 ug/L	96
32) C165 Benzene	5.07	78	25927	1.14 ug/L	98
33) C065 1,2-Dichloroethane	5.13	62	8044	1.10 ug/L	99
34) C110 2-Butanone	4.37	43	14452	7.11 ug/L	91
35) C256 Cyclohexane	4.73	56	9187	1.17 ug/L	98
36) C150 Trichloroethene	5.68	95	6459	1.14 ug/L	95
37) C140 1,2-Dichloropropane	5.92	63	5925	1.09 ug/L	98
38) C278 Dibromomethane	6.05	93	3200	1.10 ug/L	92

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6183.D
Acq On : 18 Nov 2009 13:08
Sample : RK91820-CAL1
Misc : VSTD 001
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:10:39 2009

Vial: 3
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.21	83	6647	1.00 ug/L	97
40) C161	2-Chloroethylvinyl E	6.49	63	1546	3.13 ug/L	77
41) C012	Methylcyclohexane	5.81	83	9652	1.13 ug/L	98
42) C145	cis-1,3-Dichloroprop	6.62	75	8006	1.00 ug/L	96
45) C230	Toluene	6.92	92	16885	1.13 ug/L	93
46) C170	trans-1,3-Dichloropr	7.19	75	6362	0.89 ug/L	88
47) C284	Ethyl Methacrylate	7.25	69	5099	0.90 ug/L #	88
48) C160	1,1,2-Trichloroethan	7.38	83	3911	1.08 ug/L	94
49) C210	4-Methyl-2-pentanone	6.79	43	27428	5.76 ug/L	98
50) C220	Tetrachloroethene	7.45	166	7045	1.10 ug/L	95
51) C221	1,3-Dichloropropane	7.54	76	8569	1.05 ug/L	97
52) C155	Dibromochloromethane	7.77	129	4488	0.96 ug/L	88
53) C163	1,2-Dibromoethane	7.87	107	4471	1.03 ug/L	93
54) C215	2-Hexanone	7.62	43	19127	5.70 ug/L	97
55) C235	Chlorobenzene	8.35	112	18215	1.10 ug/L	95
56) C281	1,1,1,2-Tetrachloroe	8.45	131	5691	1.04 ug/L	98
57) C240	Ethylbenzene	8.45	91	31799	1.11 ug/L	97
58) C246	m,p-Xylene	8.57	106	24221	2.17 ug/L	97
59) C247	o-Xylene	9.00	106	12100	1.10 ug/L	94
60) C245	Styrene	9.02	104	13834	0.95 ug/L	98
61) C180	Bromoform	9.27	173	2216	0.84 ug/L	89
64) C966	Isopropylbenzene	9.38	105	31465	1.06 ug/L	100
65) C301	Bromobenzene	9.73	156	7372	1.04 ug/L	94
66) C225	1,1,2,2-Tetrachloroe	9.78	83	5910	1.05 ug/L	97
67) C282	1,2,3-Trichloropropa	9.81	110	1908	1.07 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.81	51	2475	3.39 ug/L #	3
69) C302	n-Propylbenzene	9.82	91	36526	1.04 ug/L	100
70) C303	2-Chlorotoluene	9.91	126	7179	1.03 ug/L	100
71) C289	4-Chlorotoluene	10.03	126	7415	1.04 ug/L	100
72) C304	1,3,5-Trimethylbenze	9.99	105	25507	1.04 ug/L	99
73) C306	tert-Butylbenzene	10.31	134	6024	1.08 ug/L	98
74) C307	1,2,4-Trimethylbenze	10.37	105	24826	1.04 ug/L	99
75) C308	sec-Butylbenzene	10.52	105	30429	1.07 ug/L	98
76) C260	1,3-Dichlorobenzene	10.66	146	13885	1.07 ug/L	96
77) C309	4-Isopropyltoluene	10.66	119	27005	1.07 ug/L	96
78) C267	1,4-Dichlorobenzene	10.74	146	14628	1.09 ug/L	93
79) C249	1,2-Dichlorobenzene	11.10	146	12869	1.06 ug/L	98
80) C310	n-Butylbenzene	11.05	91	24065	1.07 ug/L	99
81) C286	1,2-Dibromo-3-Chloro	11.83	75	793	0.97 ug/L	87
82) C313	1,2,4-Trichlorobenze	12.51	180	7248	1.03 ug/L	93
83) C316	Hexachlorobutadiene	12.62	225	4238	1.10 ug/L	93
84) C314	Naphthalene	12.71	128	12601	1.01 ug/L	97
85) C934	1,2,3-Trichlorobenze	12.92	180	5927	1.08 ug/L	97

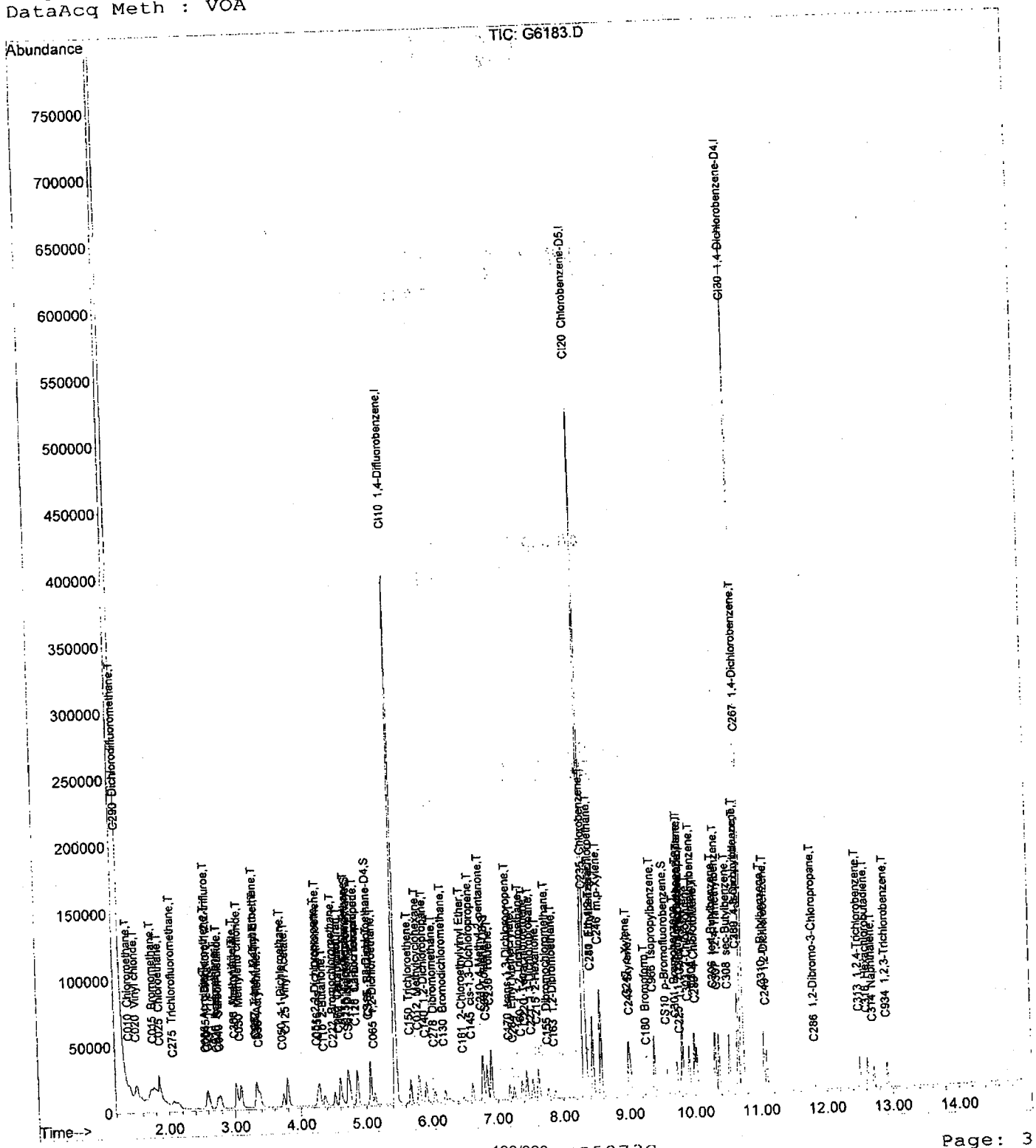
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6183.D
Acq On : 18 Nov 2009 13:08
Sample : RK91820-CAL1
Misc : VSTD 001
MS Integration Params: RTEINT.P

Vial: 3
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 19 10:10:39 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA

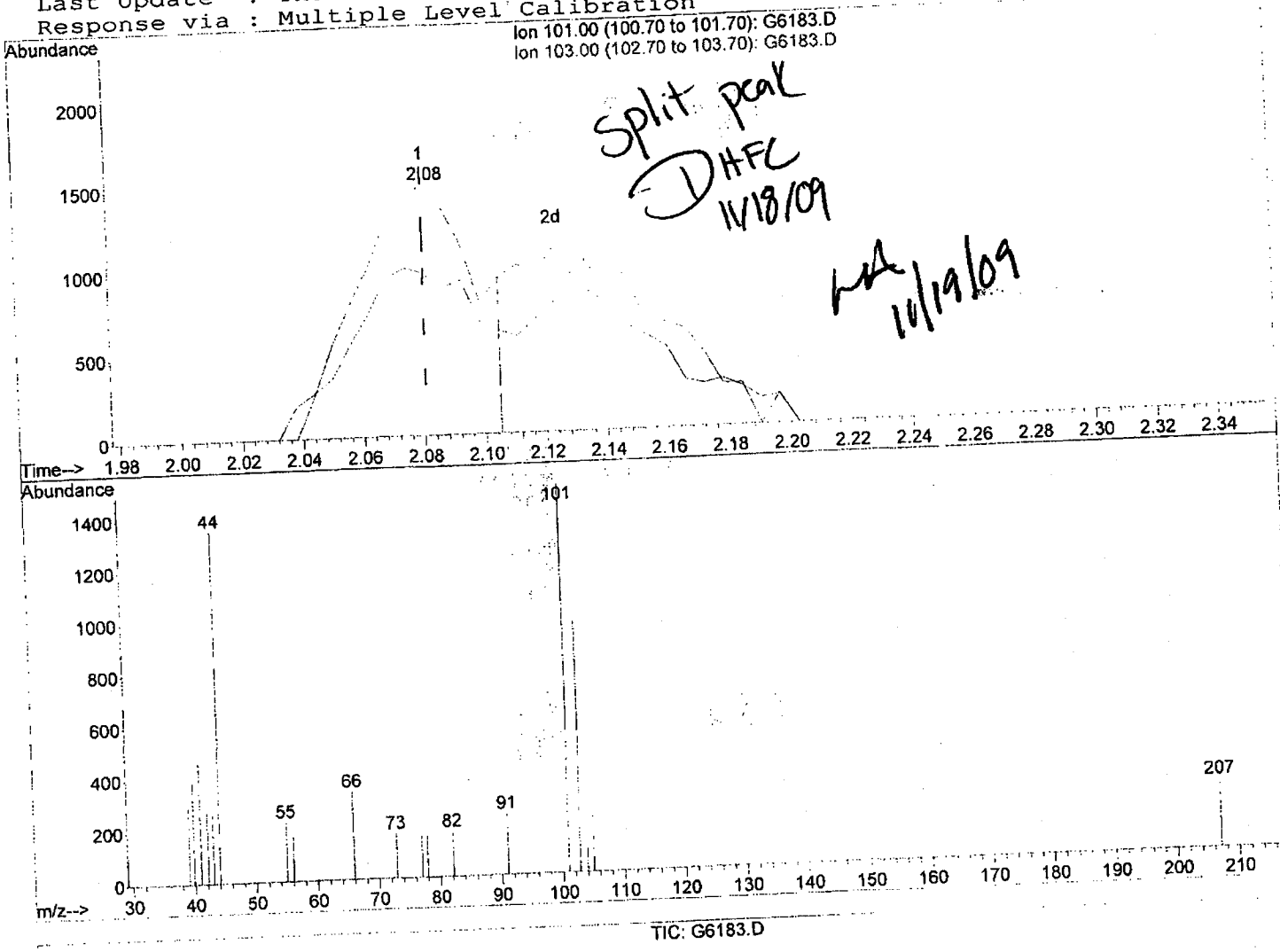


Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\111809\G6183.D
Acq On : 18 Nov 2009 13:08
Sample : RK91820-CAL1
Misc : VSTD 001
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:06 2009

Vial: 3
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Multiple Level Calibration



Split peak
-DHFC
11/18/09

11/19/09

(7) C275 Trichlorofluoromethane (T)

2.08min (0.000) 0.54ug/L

response 4011

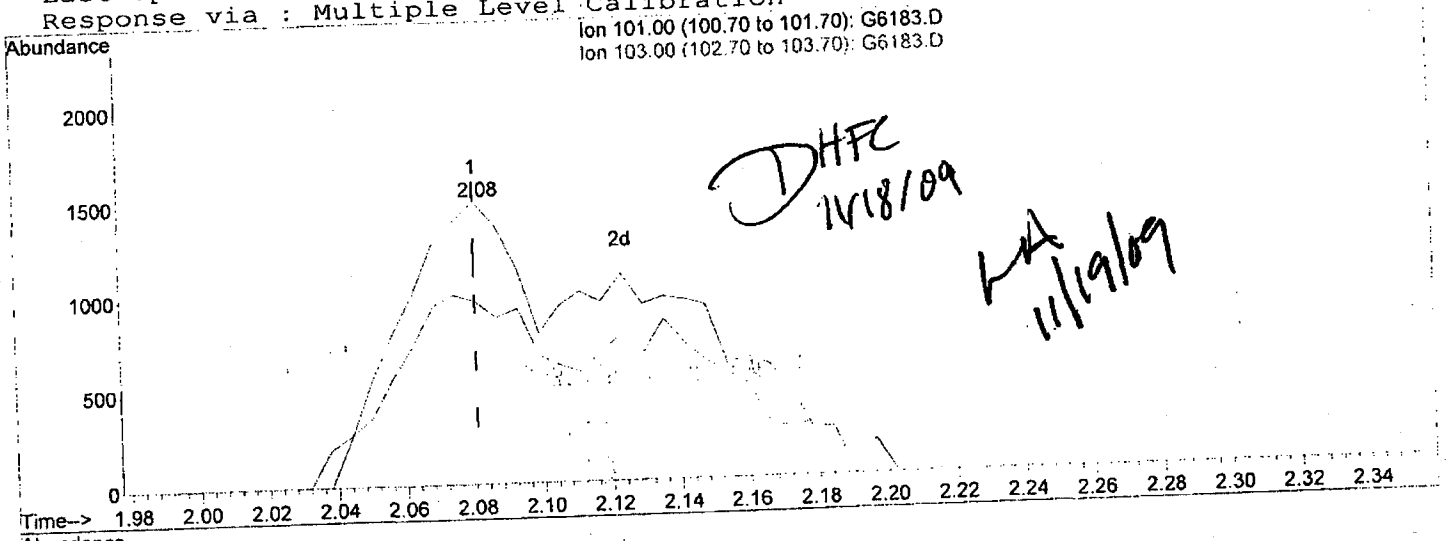
Ion	Exp%	Act%
101.00	100	100
103.00	64.90	64.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\111809\G6183.D
Acq On : 18 Nov 2009 13:08
Sample : RK91820-CAL1
Misc : VSTD 001
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:06 2009

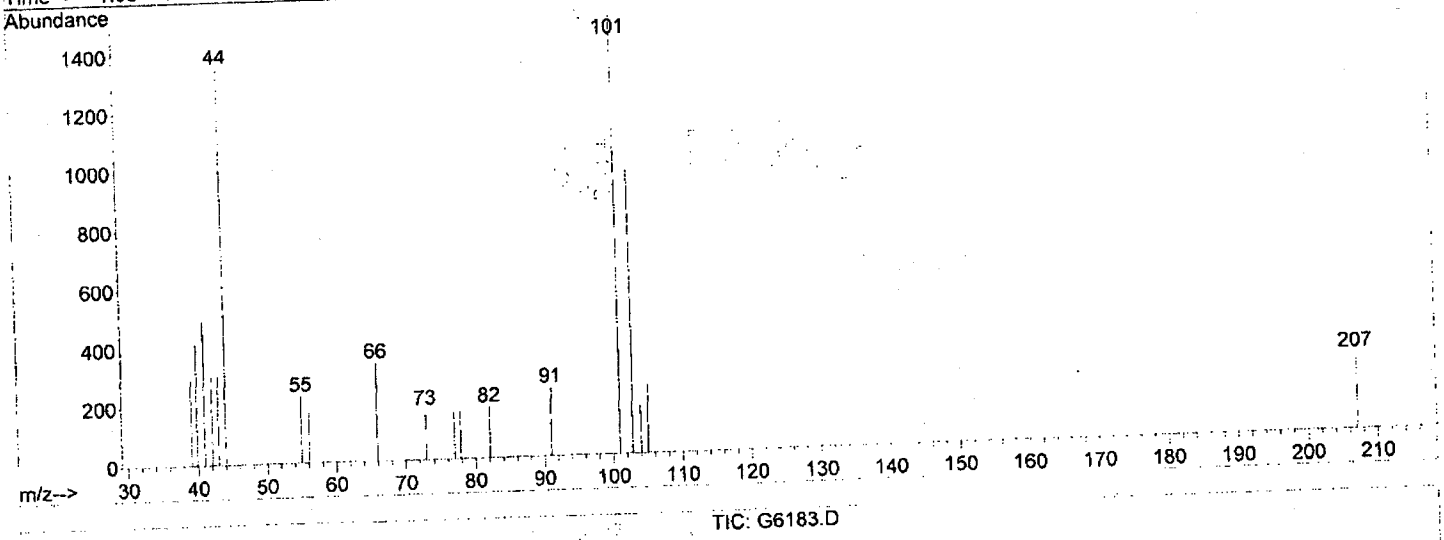
Vial: 3
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Multiple Level Calibration



DHFC 11/18/09

LA 11/19/09



TIC: G6183.D

(7) C275 Trichlorofluoromethane (T)

2.08min (0.000) 1.02ug/L m

response 7567

Ion	Exp%	Act%
101.00	100	100
103.00	64.90	64.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6184.D
Acq On : 18 Nov 2009 13:31
Sample : RK91820-CAL2
Misc : VSTD 005
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:10 2009

Vial: 4
Operator: DHC
Inst : HP5973G
Multiplr: 1.00
Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	346317	25.00 ug/L	0.00 92.31%
43) CI20 Chlorobenzene-D5	8.33	82	177799	25.00 ug/L	0.00 95.08%
63) CI30 1,4-Dichlorobenzene-	10.73	152	177755	25.00 ug/L	0.00 98.96%

System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.76	111	23749	5.74 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	22.96%#	
31) CS15 1,2-Dichloroethane-D	5.06	65	27230	5.73 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery =	22.92%#	
44) CS05 Toluene-D8	6.85	98	94854	5.60 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery =	22.40%#	
62) CS10 p-Bromofluorobenzene	9.58	174	29951	5.61 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery =	22.44%#	

Target Compounds					Qvalue
2) C290 Dichlorodifluorometh	1.28	85	23385	5.08 ug/L #	100
3) C010 Chloromethane	1.40	50	26290	5.11 ug/L	97
4) C020 Vinyl chloride	1.51	62	25611	5.09 ug/L	86
5) C015 Bromomethane	1.78	94	8282	5.25 ug/L	88
6) C025 Chloroethane	1.87	64	16047	5.16 ug/L	91
7) C275 Trichlorofluorometha	2.08	101	38228	5.04 ug/L	96
8) C045 1,1-Dichloroethene	2.60	96	22801	4.71 ug/L	96
9) C030 Methylene chloride	3.10	84	30196	4.85 ug/L	95
10) C040 Carbon disulfide	2.79	76	50464	4.65 ug/L	93
11) C036 Acrolein	2.56	56	14923	95.84 ug/L	97
12) C038 Acrylonitrile	3.38	53	35213	25.37 ug/L	95
13) C035 Acetone	2.74	43	36193	25.77 ug/L	92
14) C300 Acetonitrile	3.01	41	100915	206.02 ug/L	99
15) C276 Iodomethane	2.75	142	33779	4.85 ug/L	99
16) C291 1,1,2-Trichloro-1,2,	2.62	101	16244	4.85 ug/L	96
17) C962 T-butyl Methyl Ether	3.34	73	59587	4.83 ug/L	97
18) C057 trans-1,2-Dichloroet	3.33	96	28672	4.83 ug/L	95
19) C255 Methyl Acetate	3.02	43	30205	5.12 ug/L	96
20) C050 1,1-Dichloroethane	3.74	63	51214	4.79 ug/L	100
21) C125 Vinyl Acetate	3.80	43	185867	24.15 ug/L	99
22) C051 2,2-Dichloropropane	4.26	77	30730	4.71 ug/L	98
23) C056 cis-1,2-Dichloroethe	4.29	96	31627	4.87 ug/L	96
24) C272 Tetrahydrofuran	4.59	42	34467	24.97 ug/L	99
25) C222 Bromochloromethane	4.53	128	14737	5.06 ug/L	94
27) C060 Chloroform	4.60	83	50009	4.82 ug/L	89
28) C115 1,1,1-Trichloroethan	4.72	97	40720	4.74 ug/L	97
29) C120 Carbon tetrachloride	4.87	117	32749	4.60 ug/L	95
30) C116 1,1-Dichloropropene	4.87	75	36556	4.63 ug/L	98
32) C165 Benzene	5.07	78	112532	4.82 ug/L	96
33) C065 1,2-Dichloroethane	5.14	62	36323	4.82 ug/L	99
34) C110 2-Butanone	4.35	43	52395	25.13 ug/L	98
35) C256 Cyclohexane	4.74	56	38456	4.79 ug/L	92
36) C150 Trichloroethene	5.68	95	27528	4.72 ug/L	95
37) C140 1,2-Dichloropropane	5.92	63	26781	4.79 ug/L	95
38) C278 Dibromomethane	6.05	93	14414	4.84 ug/L	100

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6184.D
Acq On : 18 Nov 2009 13:31
Sample : RK91820-CAL2
Misc : VSTD 005
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:10 2009

Vial: 4
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.21	83	31142	4.59 ug/L	98
40) C161	2-Chloroethylvinyl E	6.49	63	8089	15.98 ug/L	98
41) C012	Methylcyclohexane	5.81	83	41589	4.74 ug/L	98
42) C145	cis-1,3-Dichloroprop	6.62	75	38221	4.65 ug/L	99
45) C230	Toluene	6.92	92	71534	4.70 ug/L	90
46) C170	trans-1,3-Dichloropr	7.19	75	32853	4.48 ug/L	96
47) C284	Ethyl Methacrylate	7.25	69	26556	4.60 ug/L #	98
48) C160	1,1,2-Trichloroethan	7.38	83	17651	4.79 ug/L	97
49) C210	4-Methyl-2-pentanone	6.78	43	123669	25.46 ug/L	96
50) C220	Tetrachloroethene	7.45	166	30288	4.64 ug/L	99
51) C221	1,3-Dichloropropane	7.54	76	40179	4.82 ug/L	94
52) C155	Dibromochloromethane	7.77	129	21228	4.47 ug/L	93
53) C163	1,2-Dibromoethane	7.88	107	21493	4.84 ug/L	94
54) C215	2-Hexanone	7.62	43	85580	25.02 ug/L	97
55) C235	Chlorobenzene	8.35	112	81479	4.81 ug/L	98
56) C281	1,1,1,2-Tetrachloroe	8.45	131	26284	4.70 ug/L	95
57) C240	Ethylbenzene	8.45	91	140755	4.81 ug/L	100
58) C246	m,p-Xylene	8.57	106	111485	9.80 ug/L	96
59) C247	o-Xylene	9.00	106	54318	4.84 ug/L	97
60) C245	Styrene	9.02	104	68807	4.63 ug/L	96
61) C180	Bromoform	9.27	173	11688	4.33 ug/L	99
64) C966	Isopropylbenzene	9.38	105	139475	4.62 ug/L	98
65) C301	Bromobenzene	9.73	156	33478	4.62 ug/L	96
66) C225	1,1,2,2-Tetrachloroe	9.78	83	26740	4.65 ug/L	99
67) C282	1,2,3-Trichloropropa	9.81	110	8850	4.88 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.82	51	14163	19.06 ug/L #	26
69) C302	n-Propylbenzene	9.82	91	166884	4.64 ug/L	96
70) C303	2-Chlorotoluene	9.91	126	32476	4.57 ug/L	100
71) C289	4-Chlorotoluene	10.03	126	33340	4.59 ug/L	100
72) C304	1,3,5-Trimethylbenze	9.99	105	117367	4.70 ug/L	97
73) C306	tert-Butylbenzene	10.31	134	27048	4.74 ug/L	96
74) C307	1,2,4-Trimethylbenze	10.37	105	114346	4.71 ug/L	99
75) C308	sec-Butylbenzene	10.52	105	135584	4.69 ug/L	97
76) C260	1,3-Dichlorobenzene	10.66	146	63525	4.82 ug/L	98
77) C309	4-Isopropyltoluene	10.66	119	122172	4.75 ug/L	99
78) C267	1,4-Dichlorobenzene	10.74	146	65090	4.75 ug/L	98
79) C249	1,2-Dichlorobenzene	11.10	146	60317	4.87 ug/L	99
80) C310	n-Butylbenzene	11.05	91	107669	4.68 ug/L	96
81) C286	1,2-Dibromo-3-Chloro	11.82	75	4008	4.80 ug/L	81
82) C313	1,2,4-Trichlorobenze	12.51	180	33675	4.71 ug/L	100
83) C316	Hexachlorobutadiene	12.62	225	18728	4.77 ug/L	97
84) C314	Naphthalene	12.71	128	59927	4.69 ug/L	99
85) C934	1,2,3-Trichlorobenze	12.92	180	26602	4.77 ug/L	97

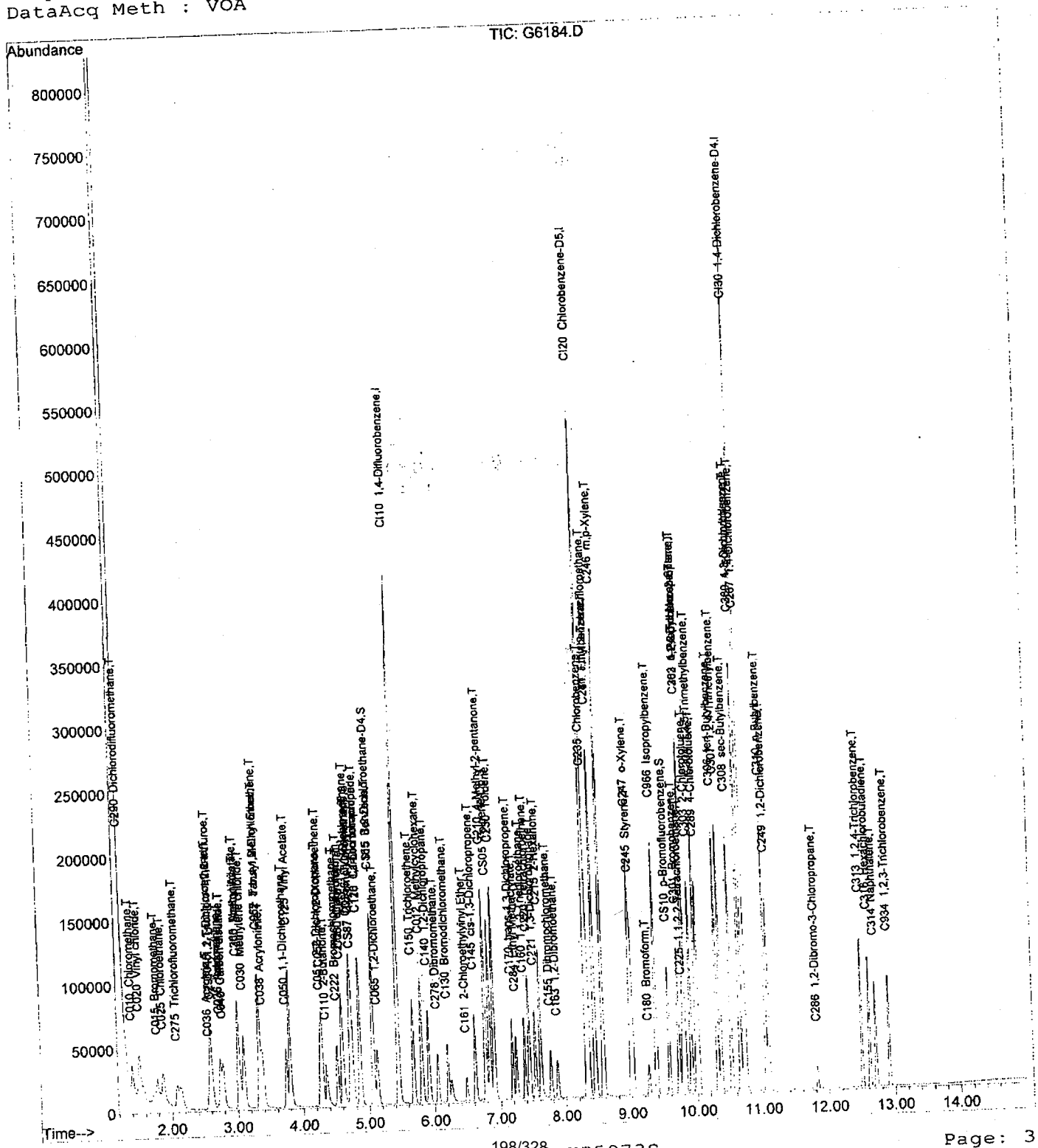
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6184.D
Acq On : 18 Nov 2009 13:31
Sample : RK91820-CAL2
Misc : VSTD 005
MS Integration Params: RTEINT.P

Vial: 4
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 19 10:09:10 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6185.D
Acq On : 18 Nov 2009 13:53
Sample : RK91820-CAL3
Misc : VSTD 010
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:11:37 2009

Vial: 5
Operator: DHC
Inst : HP5973G
Multiplr: 1.00
Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.45	114	371885	25.00	ug/L	0.00 99.13%
43) CI20	Chlorobenzene-D5	8.32	82	185801	25.00	ug/L	0.00 99.36%
63) CI30	1,4-Dichlorobenzene-	10.73	152	178515	25.00	ug/L	0.00 99.38%

System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.75	111	36693	8.26	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	33.04%#	
31) CS15	1,2-Dichloroethane-D	5.06	65	42840	8.40	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	33.60%#	
44) CS05	Toluene-D8	6.85	98	150903	8.53	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	34.12%#	
62) CS10	p-Bromofluorobenzene	9.58	174	46383	8.32	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	33.28%#	

Target Compounds						Qvalue
2) C290	Dichlorodifluorometh	1.27	85	44471	9.01 ug/L #	100
3) C010	Chloromethane	1.40	50	49264m	8.92 ug/L	99
4) C020	Vinyl chloride	1.51	62	48231	8.93 ug/L	85
5) C015	Bromomethane	1.78	94	14453	8.53 ug/L	81
6) C025	Chloroethane	1.87	64	29580	8.85 ug/L	87
7) C275	Trichlorofluorometha	2.08	101	75211	9.24 ug/L	96
8) C045	1,1-Dichloroethene	2.59	96	48316	9.30 ug/L	91
9) C030	Methylene chloride	3.09	84	60567	9.07 ug/L	91
10) C040	Carbon disulfide	2.78	76	104752	8.98 ug/L	100
11) C036	Acrolein	2.56	56	30699	183.60 ug/L	97
12) C038	Acrylonitrile	3.37	53	69081	46.35 ug/L	93
13) C035	Acetone	2.73	43	67157	44.53 ug/L	100
14) C300	Acetonitrile	3.01	41	200988	382.11 ug/L	98
15) C276	Iodomethane	2.75	142	69872	9.34 ug/L	97
16) C291	1,1,2-Trichloro-1,2,	2.61	101	33157	9.22 ug/L	99
17) C962	T-butyl Methyl Ether	3.33	73	124708	9.41 ug/L	95
18) C057	trans-1,2-Dichloroet	3.32	96	60214	9.45 ug/L	99
19) C255	Methyl Acetate	3.01	43	55414	8.75 ug/L	96
20) C050	1,1-Dichloroethane	3.74	63	107725	9.38 ug/L	99
21) C125	Vinyl Acetate	3.79	43	395005	47.79 ug/L	98
22) C051	2,2-Dichloropropane	4.26	77	66851	9.54 ug/L	97
23) C056	cis-1,2-Dichloroethe	4.29	96	65260	9.35 ug/L	99
24) C272	Tetrahydrofuran	4.57	42	66587	44.92 ug/L	93
25) C222	Bromochloromethane	4.52	128	28783	9.20 ug/L	97
27) C060	Chloroform	4.60	83	103028	9.25 ug/L	95
28) C115	1,1,1-Trichloroethan	4.72	97	86191	9.34 ug/L	98
29) C120	Carbon tetrachloride	4.86	117	70761	9.25 ug/L	99
30) C116	1,1-Dichloropropene	4.87	75	78641	9.28 ug/L	97
32) C165	Benzene	5.07	78	238034	9.49 ug/L	100
33) C065	1,2-Dichloroethane	5.13	62	75060	9.28 ug/L	99
34) C110	2-Butanone	4.34	43	102071	45.59 ug/L	93
35) C256	Cyclohexane	4.73	56	80559	9.35 ug/L	96
36) C150	Trichloroethene	5.68	95	58119	9.27 ug/L	98
37) C140	1,2-Dichloropropane	5.92	63	56916	9.48 ug/L	100
38) C278	Dibromomethane	6.05	93	29962	9.37 ug/L	92

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6185.D
Acq On : 18 Nov 2009 13:53
Sample : RK91820-CAL3
Misc : VSTD 010
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:11:37 2009

Vial: 5
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.21	83	67038	9.20	ug/L		99
40) C161	2-Chloroethylvinyl E	6.49	63	25418	46.75	ug/L		98
41) C012	Methylcyclohexane	5.81	83	87975	9.33	ug/L		97
42) C145	cis-1,3-Dichloroprop	6.62	75	84478	9.57	ug/L		99
45) C230	Toluene	6.92	92	154227	9.70	ug/L		95
46) C170	trans-1,3-Dichloropr	7.19	75	72574	9.47	ug/L		94
47) C284	Ethyl Methacrylate	7.24	69	56789	9.42	ug/L	#	99
48) C160	1,1,2-Trichloroethan	7.37	83	36901	9.58	ug/L		100
49) C210	4-Methyl-2-pentanone	6.77	43	246501	48.56	ug/L		97
50) C220	Tetrachloroethene	7.45	166	65121	9.55	ug/L		97
51) C221	1,3-Dichloropropane	7.54	76	84486	9.70	ug/L		98
52) C155	Dibromochloromethane	7.77	129	45009	9.07	ug/L		99
53) C163	1,2-Dibromoethane	7.87	107	44281	9.55	ug/L		96
54) C215	2-Hexanone	7.62	43	170457	47.70	ug/L		96
55) C235	Chlorobenzene	8.35	112	170384	9.63	ug/L		99
56) C281	1,1,1,2-Tetrachloroe	8.45	131	55779	9.55	ug/L		98
57) C240	Ethylbenzene	8.45	91	298896	9.78	ug/L		99
58) C246	m,p-Xylene	8.57	106	234394	19.73	ug/L		98
59) C247	o-Xylene	9.00	106	112219	9.58	ug/L		98
60) C245	Styrene	9.02	104	148596	9.56	ug/L		99
61) C180	Bromoform	9.27	173	25347	8.98	ug/L		96
64) C966	Isopropylbenzene	9.38	105	290986	9.60	ug/L		100
65) C301	Bromobenzene	9.73	156	68519	9.41	ug/L		96
66) C225	1,1,2,2-Tetrachloroe	9.78	83	54171	9.39	ug/L		99
67) C282	1,2,3-Trichloropropa	9.81	110	17857	9.81	ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.82	51	35181	47.15	ug/L	#	34
69) C302	n-Propylbenzene	9.82	91	349954	9.69	ug/L		96
70) C303	2-Chlorotoluene	9.91	126	68435	9.59	ug/L		100
71) C289	4-Chlorotoluene	10.03	126	69471	9.52	ug/L		100
72) C304	1,3,5-Trimethylbenze	9.99	105	241759	9.64	ug/L		98
73) C306	tert-Butylbenzene	10.32	134	55312	9.66	ug/L		98
74) C307	1,2,4-Trimethylbenze	10.37	105	237488	9.73	ug/L		100
75) C308	sec-Butylbenzene	10.52	105	282350	9.73	ug/L		97
76) C260	1,3-Dichlorobenzene	10.66	146	130543	9.86	ug/L		99
77) C309	4-Isopropyltoluene	10.66	119	254649	9.85	ug/L		99
78) C267	1,4-Dichlorobenzene	10.74	146	134183	9.75	ug/L		98
79) C249	1,2-Dichlorobenzene	11.10	146	120224	9.66	ug/L		99
80) C310	n-Butylbenzene	11.05	91	222234	9.61	ug/L		100
81) C286	1,2-Dibromo-3-Chloro	11.82	75	7668	9.14	ug/L		90
82) C313	1,2,4-Trichlorobenze	12.51	180	68288	9.51	ug/L		100
83) C316	Hexachlorobutadiene	12.62	225	38123	9.66	ug/L		96
84) C314	Naphthalene	12.71	128	119433	9.32	ug/L		100
85) C934	1,2,3-Trichlorobenze	12.92	180	53129	9.48	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

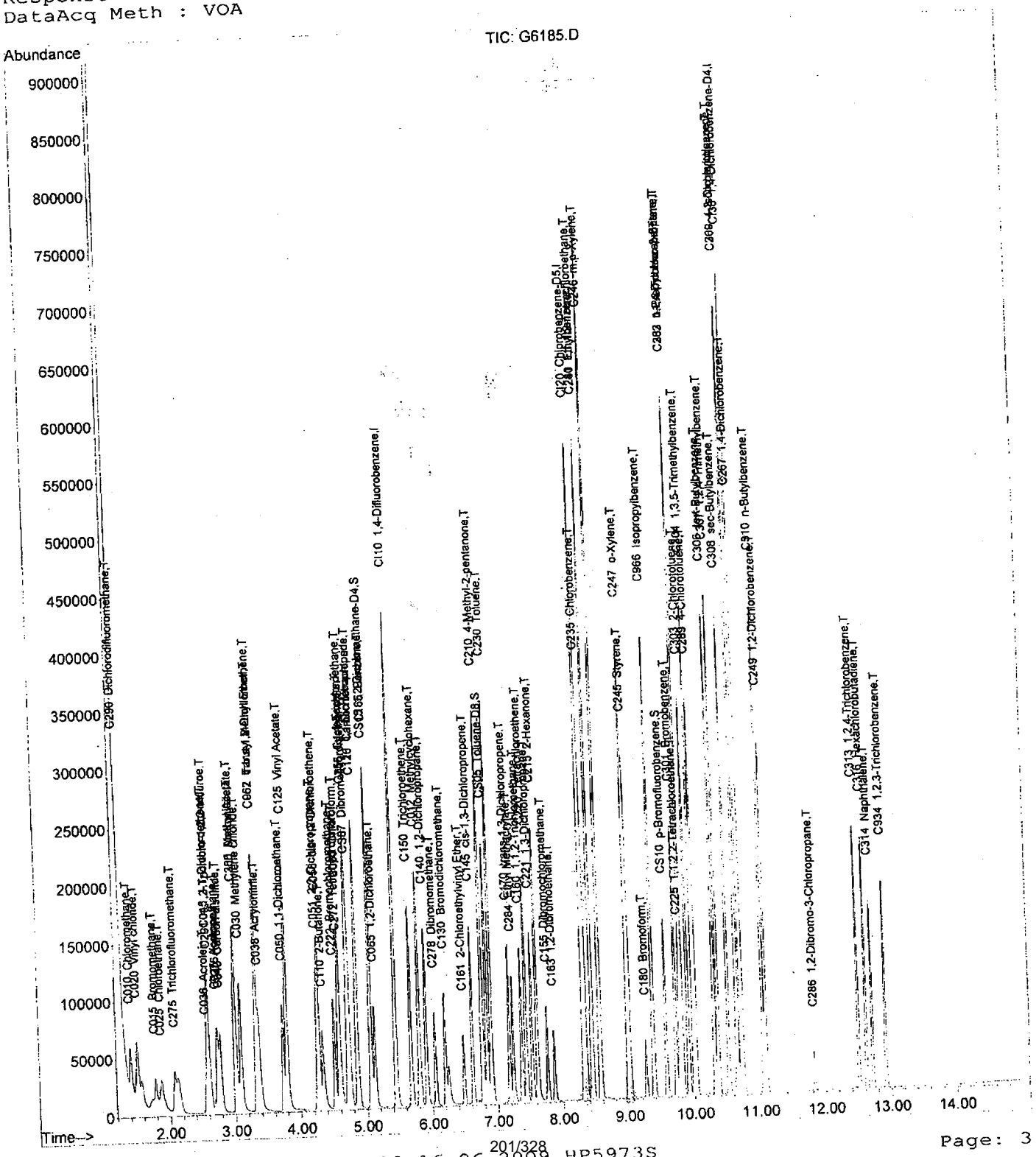
Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6185.D
Acq On : 18 Nov 2009 13:53
Sample : RK91820-CAL3
Misc : VSTD 010
MS Integration Params: RTEINT.P

Vial: 5
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 19 10:11:37 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA

TIC: G6185.D

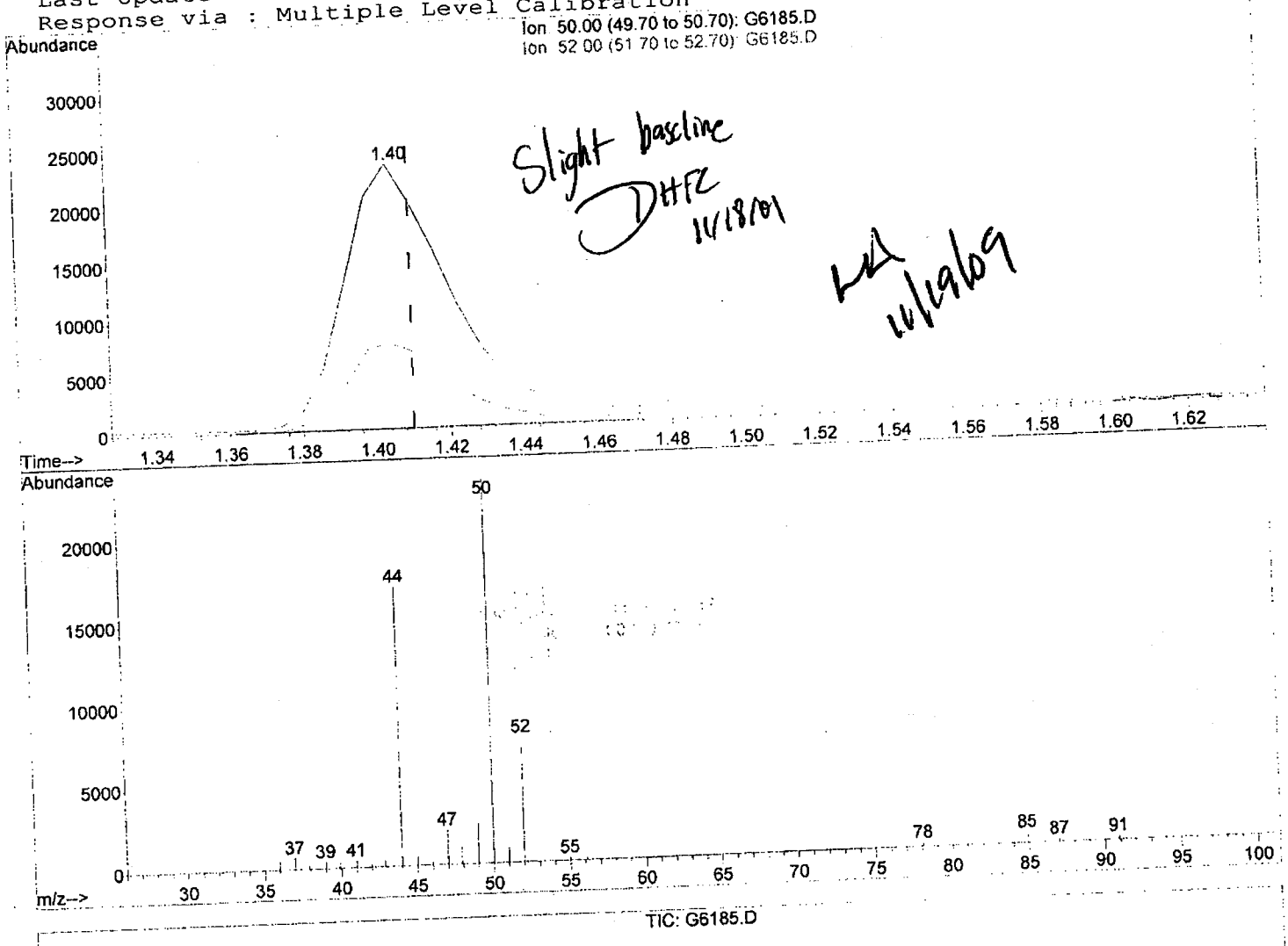


Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\111809\G6185.D
Acq On : 18 Nov 2009 13:53
Sample : RK91820-CAL3
Misc : VSTD 010
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:16 2009

Vial: 5
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Multiple Level Calibration



Slight baseline
DHFZ 11/18/09
11/19/09

TIC: G6185.D

(3) C010 Chloromethane (T)

1.40min (-0.006) 8.85ug/L

response 48886

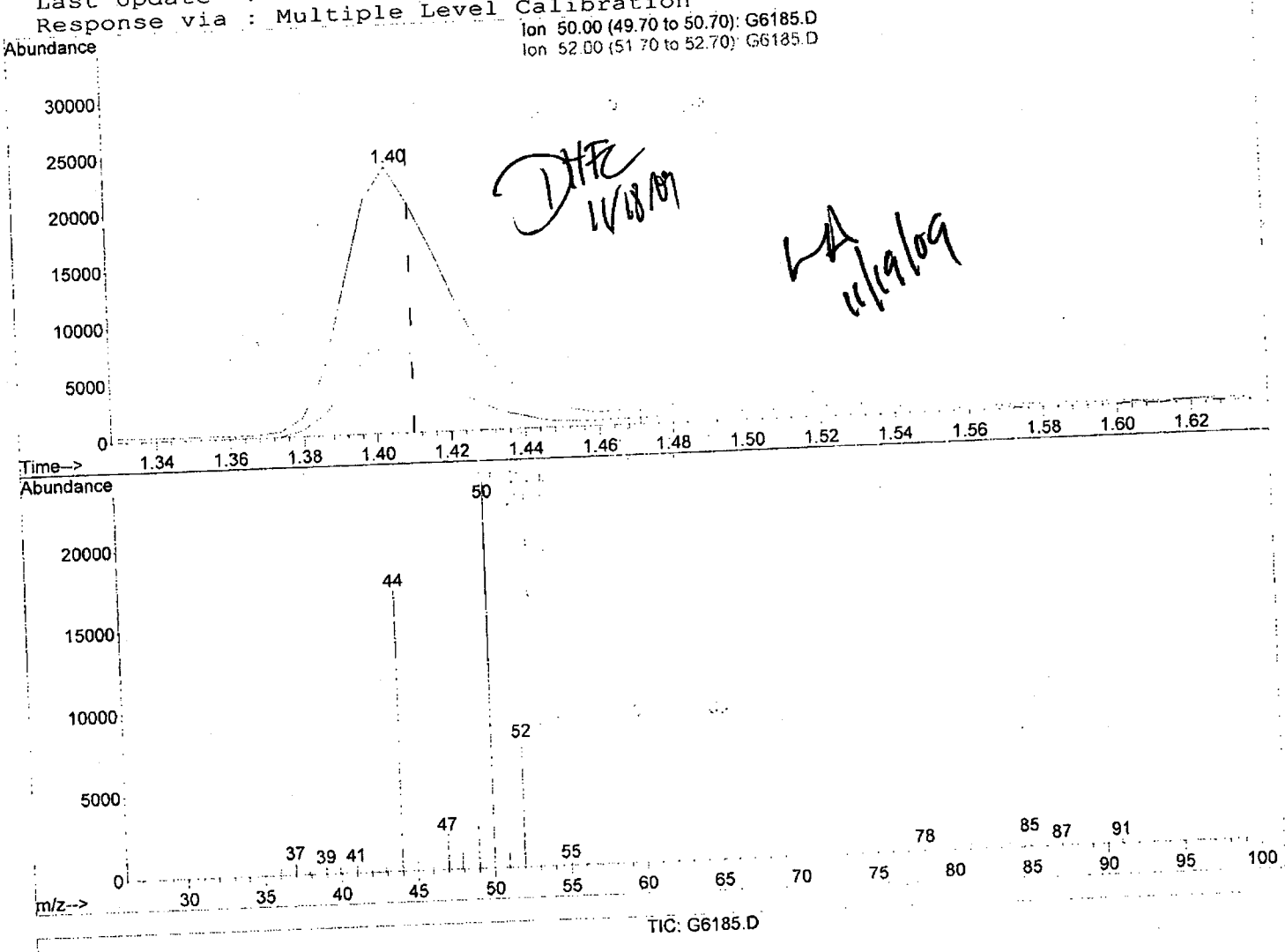
Ion	Exp%	Act%
50.00	100	100
52.00	33.00	32.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\111809\G6185.D
Acq On : 18 Nov 2009 13:53
Sample : RK91820-CAL3
Misc : VSTD 010
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:16 2009

Vial: 5
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Multiple Level Calibration



TIC: G6185.D

DHF 11/18/09

LA 11/19/09

(3) C010 Chloromethane (T)

1.40min (-0.006) 8.92ug/L m

response 49264

Ion	Exp%	Act%
50.00	100	100
52.00	33.00	32.41
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6186.D
Acq On : 18 Nov 2009 14:15
Sample : RK91820-CAL4
Misc : VSTD 025
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:21 2009

Vial: 6
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	375163	25.00 ug/L	0.00 100.00%
43) CI20 Chlorobenzene-D5	8.32	82	186991	25.00 ug/L	0.00 100.00%
63) CI30 1,4-Dichlorobenzene-	10.73	152	179629	25.00 ug/L	0.00 100.00%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.76	111	109513	24.44 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery = 97.76%		
31) CS15 1,2-Dichloroethane-D	5.06	65	124479	24.19 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery = 96.76%		
44) CS05 Toluene-D8	6.85	98	450461	25.30 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery = 101.20%		
62) CS10 p-Bromofluorobenzene	9.58	174	139250	24.81 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery = 99.24%		
Target Compounds					Qvalue
2) C290 Dichlorodifluorometh	1.27	85	129704	26.03 ug/L #	100
3) C010 Chloromethane	1.40	50	136217	24.45 ug/L	97
4) C020 Vinyl chloride	1.51	62	135836	24.93 ug/L	89
5) C015 Bromomethane	1.78	94	36941	21.62 ug/L	88
6) C025 Chloroethane	1.88	64	81894	24.30 ug/L	87
7) C275 Trichlorofluorometha	2.08	101	214107	26.08 ug/L	98
8) C045 1,1-Dichloroethene	2.59	96	126480	24.13 ug/L	96
9) C030 Methylene chloride	3.09	84	152564	22.64 ug/L	95
10) C040 Carbon disulfide	2.79	76	283627	24.11 ug/L	100
11) C036 Acrolein	2.55	56	78534	465.57 ug/L	96
12) C038 Acrylonitrile	3.37	53	176670	117.49 ug/L	92
13) C035 Acetone	2.72	43	168714	110.90 ug/L	98
14) C300 Acetonitrile	3.00	41	492192	927.56 ug/L	98
15) C276 Iodomethane	2.75	142	185548	24.59 ug/L	98
16) C291 1,1,2-Trichloro-1,2,	2.61	101	92264	25.42 ug/L	99
17) C962 T-butyl Methyl Ether	3.32	73	326749	24.44 ug/L	96
18) C057 trans-1,2-Dichloroet	3.32	96	159886	24.86 ug/L	98
19) C255 Methyl Acetate	3.00	43	141825	22.21 ug/L	94
20) C050 1,1-Dichloroethane	3.74	63	287141	24.78 ug/L	99
21) C125 Vinyl Acetate	3.79	43	1058103	126.90 ug/L	97
22) C051 2,2-Dichloropropane	4.26	77	179747	25.43 ug/L	96
23) C056 cis-1,2-Dichloroethe	4.29	96	173751	24.69 ug/L	97
24) C272 Tetrahydrofuran	4.56	42	170904	114.29 ug/L	93
25) C222 Bromochloromethane	4.52	128	77848	24.66 ug/L	96
27) C060 Chloroform	4.60	83	276859	24.65 ug/L	99
28) C115 1,1,1-Trichloroethan	4.72	97	233162	25.05 ug/L	99
29) C120 Carbon tetrachloride	4.86	117	195182	25.30 ug/L	98
30) C116 1,1-Dichloropropene	4.87	75	217109	25.40 ug/L	98
32) C165 Benzene	5.07	78	631877	24.97 ug/L	98
33) C065 1,2-Dichloroethane	5.13	62	204380	25.05 ug/L	99
34) C110 2-Butanone	4.33	43	252873	111.95 ug/L	95
35) C256 Cyclohexane	4.73	56	217269	24.99 ug/L	95
36) C150 Trichloroethene	5.68	95	158226	25.02 ug/L	98
37) C140 1,2-Dichloropropane	5.92	63	154098	25.44 ug/L	100
38) C278 Dibromomethane	6.05	93	80327	24.89 ug/L	95

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6186.D Vial: 6
Acq On : 18 Nov 2009 14:15 Operator: DHC
Sample : RK91820-CAL4 Inst : HP5973G
Misc : VSTD 025 Multiplr: 1.00
MS Integration Params: RTEINT.P Results File: R9K1805-SIXPT.RES
Quant Time: Nov 19 10:09:21 2009

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.21	83	189534	25.79 ug/L	99
40) C161	2-Chloroethylvinyl E	6.49	63	78737	143.55 ug/L	97
41) C012	Methylcyclohexane	5.81	83	240852	25.32 ug/L	97
42) C145	cis-1,3-Dichloroprop	6.62	75	232866	26.16 ug/L	100
45) C230	Toluene	6.92	92	404177	25.25 ug/L	94
46) C170	trans-1,3-Dichloropr	7.19	75	206874	26.83 ug/L	97
47) C284	Ethyl Methacrylate	7.24	69	160885	26.50 ug/L #	97
48) C160	1,1,2-Trichloroethan	7.38	83	96838	24.99 ug/L	99
49) C210	4-Methyl-2-pentanone	6.77	43	626268	122.60 ug/L	97
50) C220	Tetrachloroethene	7.45	166	176345	25.70 ug/L	99
51) C221	1,3-Dichloropropane	7.54	76	222497	25.38 ug/L	99
52) C155	Dibromochloromethane	7.77	129	129642	25.96 ug/L	99
53) C163	1,2-Dibromoethane	7.87	107	117964	25.27 ug/L	97
54) C215	2-Hexanone	7.61	43	442927	123.15 ug/L	97
55) C235	Chlorobenzene	8.35	112	452779	25.42 ug/L	99
56) C281	1,1,1,2-Tetrachloroe	8.45	131	151827	25.83 ug/L	97
57) C240	Ethylbenzene	8.45	91	793120	25.79 ug/L	99
58) C246	m,p-Xylene	8.57	106	614943	51.42 ug/L	99
59) C247	o-Xylene	9.00	106	299547	25.40 ug/L	96
60) C245	Styrene	9.02	104	415762	26.59 ug/L	99
61) C180	Bromoform	9.27	173	73941	26.03 ug/L	96
64) C966	Isopropylbenzene	9.38	105	776780	25.48 ug/L	99
65) C301	Bromobenzene	9.73	156	185001	25.25 ug/L	94
66) C225	1,1,2,2-Tetrachloroe	9.78	83	145123	24.99 ug/L	98
67) C282	1,2,3-Trichloropropa	9.81	110	45501	24.85 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.82	51	104226	138.83 ug/L #	42
69) C302	n-Propylbenzene	9.82	91	947910	26.10 ug/L	96
70) C303	2-Chlorotoluene	9.91	126	184806	25.73 ug/L	100
71) C289	4-Chlorotoluene	10.03	126	187987	25.61 ug/L	100
72) C304	1,3,5-Trimethylbenze	9.99	105	651639	25.83 ug/L	98
73) C306	tert-Butylbenzene	10.32	134	147854	25.65 ug/L	96
74) C307	1,2,4-Trimethylbenze	10.37	105	630611	25.68 ug/L	99
75) C308	sec-Butylbenzene	10.52	105	747011	25.58 ug/L	97
76) C260	1,3-Dichlorobenzene	10.66	146	338862	25.43 ug/L	99
77) C309	4-Isopropyltoluene	10.66	119	672560	25.85 ug/L	98
78) C267	1,4-Dichlorobenzene	10.74	146	348402	25.15 ug/L	98
79) C249	1,2-Dichlorobenzene	11.10	146	318150	25.41 ug/L	98
80) C310	n-Butylbenzene	11.05	91	601908	25.88 ug/L	98
81) C286	1,2-Dibromo-3-Chloro	11.82	75	21260	25.18 ug/L	83
82) C313	1,2,4-Trichlorobenze	12.51	180	188074	26.03 ug/L	99
83) C316	Hexachlorobutadiene	12.62	225	101201	25.49 ug/L	98
84) C314	Naphthalene	12.71	128	335996	26.05 ug/L	100
85) C934	1,2,3-Trichlorobenze	12.92	180	145745	25.85 ug/L	97

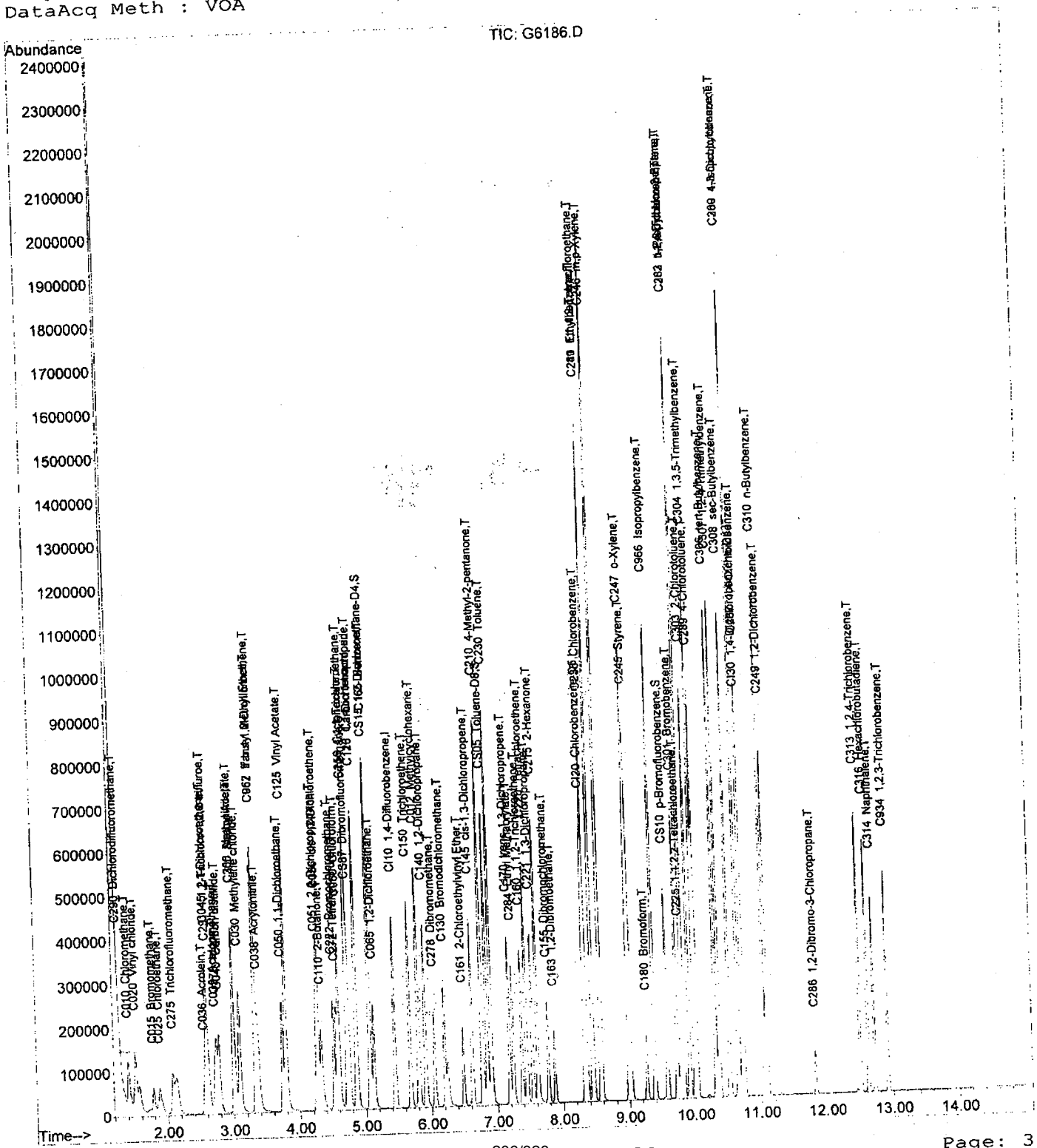
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6186.D
Acq On : 18 Nov 2009 14:15
Sample : RK91820-CAL4
Misc : VSTD 025
MS Integration Params: RTEINT.P

Vial: 6
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 19 10:09:21 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6187.D
Acq On : 18 Nov 2009 14:38
Sample : RK91820-CAL5
Misc : VSTD 050
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:25 2009

Vial: 7
Operator: DHC
Inst : HP5973G
Multiplr: 1.00
Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	366034	25.00 ug/L	0.00 97.57%
43) CI20 Chlorobenzene-D5	8.33	82	182036	25.00 ug/L	0.00 97.35%
63) CI30 1,4-Dichlorobenzene-	10.73	152	170879	25.00 ug/L	0.00 95.13%

System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.76	111	210458	48.13 ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	192.52%#	
31) CS15 1,2-Dichloroethane-D	5.06	65	238354	47.47 ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery =	189.88%#	
44) CS05 Toluene-D8	6.85	98	818335	47.21 ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery =	188.84%#	
62) CS10 p-Bromofluorobenzene	9.58	174	263515	48.23 ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery =	192.92%#	

Target Compounds					Qvalue
2) C290 Dichlorodifluorometh	1.27	85	245112	50.43 ug/L #	100
3) C010 Chloromethane	1.41	50	258105	47.49 ug/L	97
4) C020 Vinyl chloride	1.52	62	257378	48.41 ug/L	86
5) C015 Bromomethane	1.79	94	69704	41.81 ug/L	90
6) C025 Chloroethane	1.88	64	153273	46.61 ug/L	88
7) C275 Trichlorofluorometha	2.09	101	403154	50.33 ug/L	98
8) C045 1,1-Dichloroethene	2.60	96	248602	48.61 ug/L	96
9) C030 Methylene chloride	3.10	84	302918	46.08 ug/L	94
10) C040 Carbon disulfide	2.79	76	560775	48.86 ug/L	99
11) C036 Acrolein	2.56	56	161625	982.05 ug/L	96
12) C038 Acrylonitrile	3.37	53	353298	240.81 ug/L	92
13) C035 Acetone	2.71	43	331313	223.22 ug/L	97
14) C300 Acetonitrile	3.00	41	955849	1846.27 ug/L	99
15) C276 Iodomethane	2.75	142	364929	49.57 ug/L	99
16) C291 1,1,2-Trichloro-1,2,	2.62	101	176840	49.94 ug/L	98
17) C962 T-butyl Methyl Ether	3.32	73	651147	49.93 ug/L	95
18) C057 trans-1,2-Dichloroet	3.33	96	311418	49.63 ug/L	99
19) C255 Methyl Acetate	3.00	43	282013	45.26 ug/L	95
20) C050 1,1-Dichloroethane	3.74	63	570120	50.42 ug/L	100
21) C125 Vinyl Acetate	3.79	43	2052617	252.31 ug/L	97
22) C051 2,2-Dichloropropane	4.26	77	351744	51.00 ug/L	95
23) C056 cis-1,2-Dichloroethe	4.29	96	343854	50.08 ug/L	98
24) C272 Tetrahydrofuran	4.56	42	333110	228.33 ug/L	93
25) C222 Bromochloromethane	4.53	128	156448	50.79 ug/L	94
27) C060 Chloroform	4.60	83	548617	50.06 ug/L	98
28) C115 1,1,1-Trichloroethan	4.72	97	460089	50.67 ug/L	98
29) C120 Carbon tetrachloride	4.86	117	390626	51.89 ug/L	98
30) C116 1,1-Dichloropropene	4.87	75	423813	50.81 ug/L	97
32) C165 Benzene	5.07	78	1232517	49.91 ug/L	99
33) C065 1,2-Dichloroethane	5.13	62	403513	50.69 ug/L	99
34) C110 2-Butanone	4.33	43	486145	220.60 ug/L	94
35) C256 Cyclohexane	4.73	56	416568	49.10 ug/L	95
36) C150 Trichloroethene	5.68	95	309790	50.21 ug/L	98
37) C140 1,2-Dichloropropane	5.92	63	297084	50.27 ug/L	100
38) C278 Dibromomethane	6.05	93	159178	50.55 ug/L	94

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6187.D Vial: 7
Acq On : 18 Nov 2009 14:38 Operator: DHC
Sample : RK91820-CAL5 Inst : HP5973G
Misc : VSTD 050 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:25 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.21	83	381292	53.17 ug/L	99
40) C161	2-Chloroethylvinyl E	6.49	63	155930	291.38 ug/L	96
41) C012	Methylcyclohexane	5.81	83	466382	50.26 ug/L	97
42) C145	cis-1,3-Dichloroprop	6.62	75	455219	52.41 ug/L	99
45) C230	Toluene	6.92	92	765774	49.15 ug/L	93
46) C170	trans-1,3-Dichloropr	7.19	75	409100	54.51 ug/L	97
47) C284	Ethyl Methacrylate	7.24	69	319892	54.13 ug/L #	96
48) C160	1,1,2-Trichloroethan	7.38	83	189627	50.26 ug/L	99
49) C210	4-Methyl-2-pentanone	6.77	43	1187683	238.83 ug/L	97
50) C220	Tetrachloroethene	7.45	166	333605	49.94 ug/L	100
51) C221	1,3-Dichloropropane	7.54	76	429063	50.27 ug/L	100
52) C155	Dibromochloromethane	7.77	129	262960	54.09 ug/L	99
53) C163	1,2-Dibromoethane	7.87	107	230638	50.75 ug/L	98
54) C215	2-Hexanone	7.61	43	852763	243.55 ug/L	96
55) C235	Chlorobenzene	8.35	112	863368	49.78 ug/L	98
56) C281	1,1,1,2-Tetrachloroe	8.45	131	297196	51.95 ug/L	98
57) C240	Ethylbenzene	8.45	91	1480383	49.45 ug/L	99
58) C246	m,p-Xylene	8.57	106	1149293	98.72 ug/L	98
59) C247	o-Xylene	9.00	106	573724	49.97 ug/L	98
60) C245	Styrene	9.02	104	812962	53.41 ug/L	100
61) C180	Bromoform	9.27	173	158903	57.47 ug/L	100
64) C966	Isopropylbenzene	9.38	105	1481755	51.09 ug/L	99
65) C301	Bromobenzene	9.73	156	361742	51.91 ug/L	94
66) C225	1,1,2,2-Tetrachloroe	9.78	83	285533	51.69 ug/L	98
67) C282	1,2,3-Trichloropropa	9.81	110	86734	49.80 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.82	51	217772	304.93 ug/L #	44
69) C302	n-Propylbenzene	9.82	91	1794428	51.93 ug/L	97
70) C303	2-Chlorotoluene	9.92	126	354459	51.87 ug/L	100
71) C289	4-Chlorotoluene	10.03	126	362643	51.93 ug/L	100
72) C304	1,3,5-Trimethylbenze	9.99	105	1241349	51.73 ug/L	98
73) C306	tert-Butylbenzene	10.32	134	278598	50.81 ug/L	96
74) C307	1,2,4-Trimethylbenze	10.37	105	1206167	51.64 ug/L	99
75) C308	sec-Butylbenzene	10.52	105	1420359	51.12 ug/L	98
76) C260	1,3-Dichlorobenzene	10.66	146	636352	50.21 ug/L	99
77) C309	4-Isopropyltoluene	10.66	119	1266810	51.18 ug/L	98
78) C267	1,4-Dichlorobenzene	10.74	146	660840	50.15 ug/L	97
79) C249	1,2-Dichlorobenzene	11.10	146	600122	50.38 ug/L	98
80) C310	n-Butylbenzene	11.05	91	1147145	51.84 ug/L	99
81) C286	1,2-Dibromo-3-Chloro	11.82	75	41843	52.09 ug/L	84
82) C313	1,2,4-Trichlorobenze	12.51	180	363908	52.95 ug/L	99
83) C316	Hexachlorobutadiene	12.62	225	196814	52.10 ug/L	99
84) C314	Naphthalene	12.71	128	655270	53.40 ug/L	99
85) C934	1,2,3-Trichlorobenze	12.92	180	282638	52.69 ug/L	100

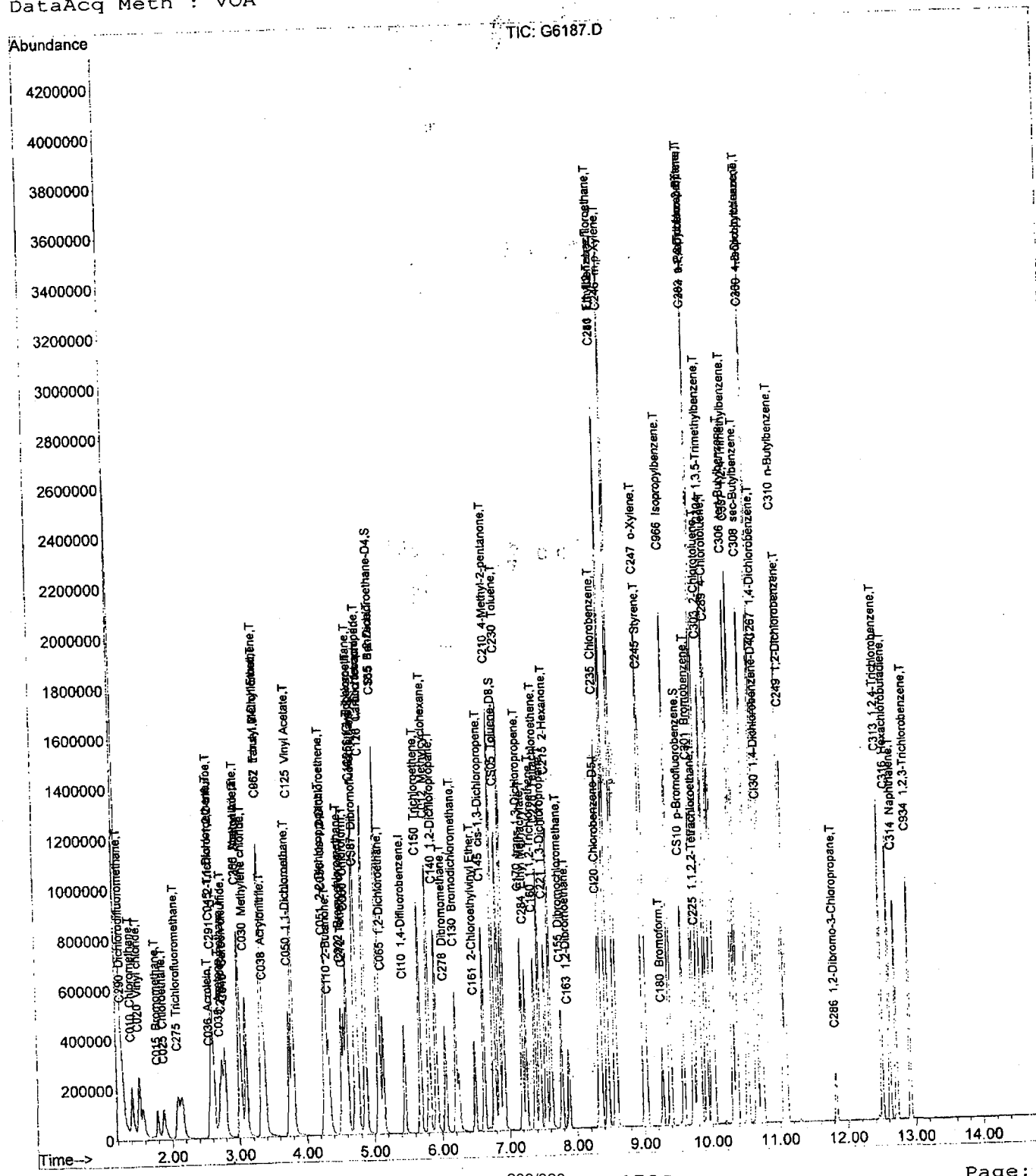
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6187.D
Acq On : 18 Nov 2009 14:38
Sample : RK91820-CAL5
Misc : VSTD 050
MS Integration Params: RTEINT.P

Vial: 7
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 19 10:09:25 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6188.D Vial: 8
Acq On : 18 Nov 2009 15:00 Operator: DHC
Sample : RK91820-CAL6 Inst : HP5973G
Misc : VSTD 100 Multiplr: 1.00
MS Integration Params: RTEINT.P Results File: R9K1805-SIXPT.RES
Quant Time: Nov 19 10:12:29 2009

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	375447	25.00	ug/L	0.00 100.08%
43) CI20 Chlorobenzene-D5	8.33	82	179052	25.00	ug/L	0.00 95.75%
63) CI30 1,4-Dichlorobenzene-	10.73	152	160154	25.00	ug/L	0.00 89.16%
System Monitoring Compounds						
26) CS87 Dibromofluoromethane	4.76	111	449317	100.18	ug/L	0.00
Spiked Amount 25.000	Range 70 - 130		Recovery =	400.72%#		
31) CS15 1,2-Dichloroethane-D	5.06	65	513632	99.74	ug/L	0.00
Spiked Amount 25.000	Range 66 - 137		Recovery =	398.96%#		
44) CS05 Toluene-D8	6.85	98	1696571	99.51	ug/L	0.00
Spiked Amount 25.000	Range 71 - 126		Recovery =	398.04%#		
62) CS10 p-Bromofluorobenzene	9.58	174	542448	100.93	ug/L	0.00
Spiked Amount 25.000	Range 73 - 120		Recovery =	403.72%#		
Target Compounds						Qvalue
2) C290 Dichlorodifluorometh	1.28	85	493970	99.08	ug/L #	100
3) C010 Chloromethane	1.42	50	514578	92.31	ug/L	99
4) C020 Vinyl chloride	1.52	62	517977	94.98	ug/L	89
5) C015 Bromomethane	1.79	94	136588	79.88	ug/L	87
6) C025 Chloroethane	1.89	64	315780	93.62	ug/L	89
7) C275 Trichlorofluorometha	2.09	101	815089m	99.20	ug/L	100
8) C045 1,1-Dichloroethene	2.59	96	503266	95.94	ug/L	98
9) C030 Methylene chloride	3.10	84	602056	89.28	ug/L	93
10) C040 Carbon disulfide	2.79	76	1182996	100.50	ug/L	99
11) C036 Acrolein	2.55	56	338240	2003.66	ug/L	96
12) C038 Acrylonitrile	3.37	53	719730	478.28	ug/L	92
13) C035 Acetone	2.71	43	670678	440.53	ug/L	98
14) C300 Acetonitrile	3.00	41	1932764	3639.63	ug/L	99
15) C276 Iodomethane	2.75	142	754106	99.86	ug/L	99
16) C291 1,1,2-Trichloro-1,2,	2.62	101	361402	99.50	ug/L	99
17) C962 T-butyl Methyl Ether	3.32	73	1334712	99.77	ug/L	95
18) C057 trans-1,2-Dichloroet	3.33	96	610416	94.84	ug/L	98
19) C255 Methyl Acetate	3.00	43	574901	89.96	ug/L	96
20) C050 1,1-Dichloroethane	3.74	63	1139008	98.21	ug/L	100
21) C125 Vinyl Acetate	3.79	43	4146553	496.92	ug/L	96
22) C051 2,2-Dichloropropane	4.26	77	688343	97.30	ug/L	96
23) C056 cis-1,2-Dichloroethe	4.29	96	679419	96.46	ug/L	98
24) C272 Tetrahydrofuran	4.55	42	686153	458.53	ug/L	93
25) C222 Bromochloromethane	4.53	128	307964	97.47	ug/L	97
27) C060 Chloroform	4.60	83	1088345	96.81	ug/L	99
28) C115 1,1,1-Trichloroethan	4.72	97	914649	98.20	ug/L	97
29) C120 Carbon tetrachloride	4.86	117	789189	102.21	ug/L	100
30) C116 1,1-Dichloropropene	4.87	75	842649	98.49	ug/L	99
32) C165 Benzene	5.07	78	2412023	95.23	ug/L	99
33) C065 1,2-Dichloroethane	5.13	62	812843	99.56	ug/L	99
34) C110 2-Butanone	4.32	43	997966	441.49	ug/L	93
35) C256 Cyclohexane	4.73	56	828339	95.18	ug/L	95
36) C150 Trichloroethene	5.68	95	626055	98.93	ug/L	96
37) C140 1,2-Dichloropropane	5.92	63	596394	98.39	ug/L	100
38) C278 Dibromomethane	6.05	93	318837	98.72	ug/L	94

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6188.D
Acq On : 18 Nov 2009 15:00
Sample : RK91820-CAL6
Misc : VSTD 100
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:12:29 2009

Vial: 8
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\G\DATA\111809\G6186.D (18 Nov 2009 14:15)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.21	83	781403	106.23 ug/L	99
40) C161	2-Chloroethylvinyl E	6.49	63	407711	742.77 ug/L	97
41) C012	Methylcyclohexane	5.81	83	926375	97.33 ug/L	98
42) C145	cis-1,3-Dichloroprop	6.62	75	907747	101.88 ug/L	99
45) C230	Toluene	6.92	92	1480218	96.58 ug/L	96
46) C170	trans-1,3-Dichloropr	7.19	75	817660	110.76 ug/L	97
47) C284	Ethyl Methacrylate	7.24	69	636159	109.45 ug/L #	96
48) C160	1,1,2-Trichloroethan	7.38	83	370011	99.70 ug/L	99
49) C210	4-Methyl-2-pentanone	6.77	43	2257339	461.49 ug/L	95
50) C220	Tetrachloroethene	7.45	166	649975	98.91 ug/L	98
51) C221	1,3-Dichloropropane	7.54	76	837679	99.78 ug/L	98
52) C155	Dibromochloromethane	7.77	129	533263	111.51 ug/L	99
53) C163	1,2-Dibromoethane	7.88	107	458004	102.45 ug/L	97
54) C215	2-Hexanone	7.61	43	1627869	472.66 ug/L	95
55) C235	Chlorobenzene	8.36	112	1648962	96.66 ug/L	99
56) C281	1,1,1,2-Tetrachloroe	8.46	131	558856	99.31 ug/L	97
57) C240	Ethylbenzene	8.45	91	2735328	92.90 ug/L	99
58) C246	m,p-Xylene	8.57	106	2133137	186.29 ug/L	100
59) C247	o-Xylene	9.00	106	1081862	95.80 ug/L	97
60) C245	Styrene	9.02	104	1552828	103.72 ug/L	98
61) C180	Bromoform	9.27	173	328721	120.87 ug/L	97
64) C966	Isopropylbenzene	9.38	105	2749354	101.15 ug/L	99
65) C301	Bromobenzene	9.73	156	686392	105.09 ug/L	99
66) C225	1,1,2,2-Tetrachloroe	9.78	83	543028	104.89 ug/L	98
67) C282	1,2,3-Trichloropropa	9.81	110	159753	97.87 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.82	51	430125	642.60 ug/L #	48
69) C302	n-Propylbenzene	9.82	91	3186696	98.40 ug/L	96
70) C303	2-Chlorotoluene	9.92	126	660892	103.20 ug/L	100
71) C289	4-Chlorotoluene	10.03	126	672297	102.72 ug/L	100
72) C304	1,3,5-Trimethylbenze	10.00	105	2218758	98.65 ug/L	99
73) C306	tert-Butylbenzene	10.32	134	497475	96.80 ug/L	96
74) C307	1,2,4-Trimethylbenze	10.37	105	2155560	98.46 ug/L	100
75) C308	sec-Butylbenzene	10.52	105	2529117	97.12 ug/L	98
76) C260	1,3-Dichlorobenzene	10.66	146	1135941	95.62 ug/L	99
77) C309	4-Isopropyltoluene	10.67	119	2180323	93.99 ug/L	98
78) C267	1,4-Dichlorobenzene	10.75	146	1210088	97.97 ug/L	99
79) C249	1,2-Dichlorobenzene	11.10	146	1092419	97.85 ug/L	97
80) C310	n-Butylbenzene	11.05	91	2003625	96.61 ug/L	98
81) C286	1,2-Dibromo-3-Chloro	11.82	75	83652	111.11 ug/L	84
82) C313	1,2,4-Trichlorobenze	12.51	180	627105	97.36 ug/L	99
83) C316	Hexachlorobutadiene	12.62	225	325879	92.05 ug/L	99
84) C314	Naphthalene	12.72	128	1166145	101.39 ug/L	99
85) C934	1,2,3-Trichlorobenze	12.92	180	466888	92.87 ug/L	99

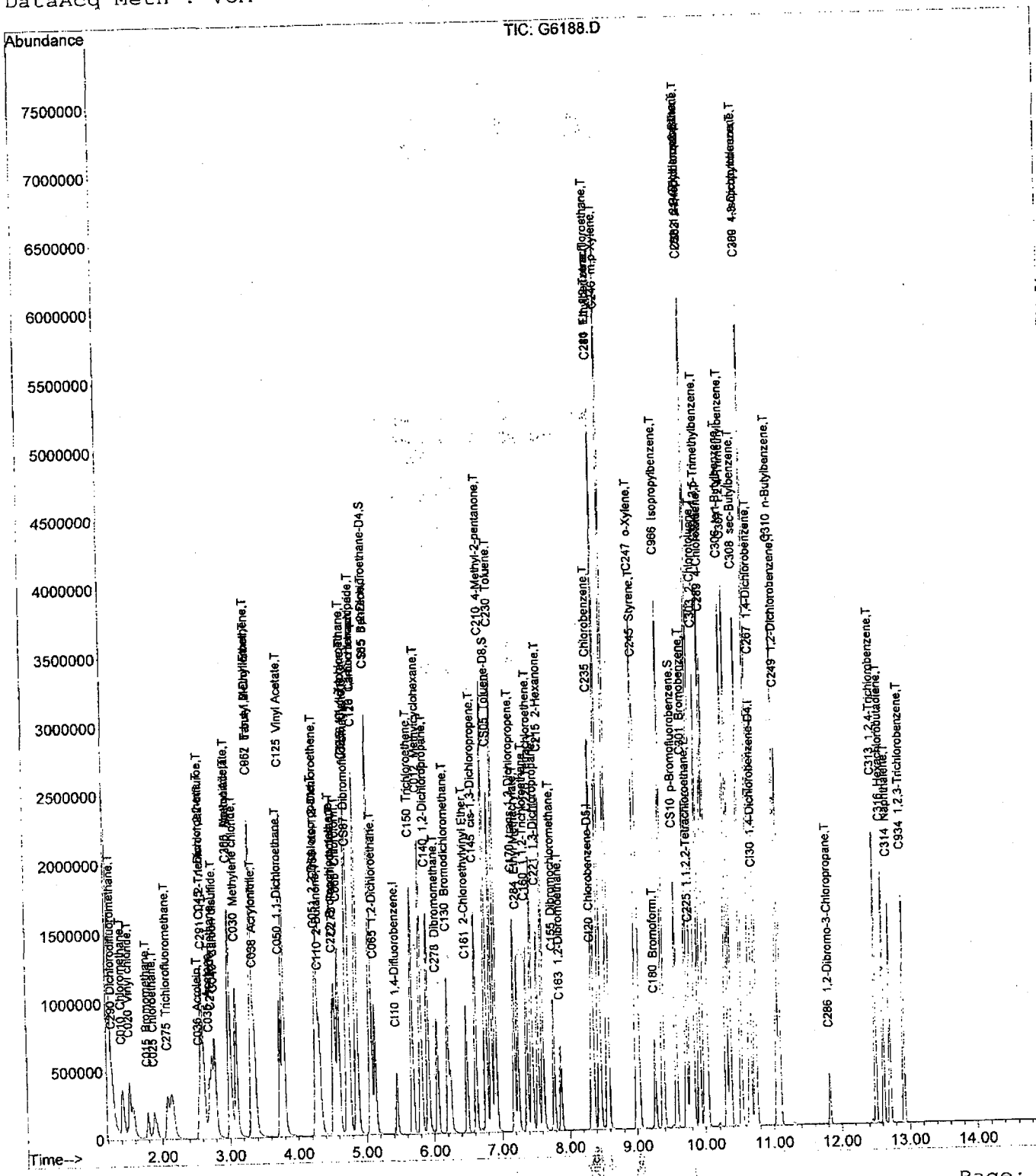
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\G\DATA\111809\G6188.D
Acq On : 18 Nov 2009 15:00
Sample : RK91820-CAL6
Misc : VSTD 100
MS Integration Params: RTEINT.P

Vial: 8
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 19 10:12:29 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Initial Calibration
DataAcq Meth : VOA

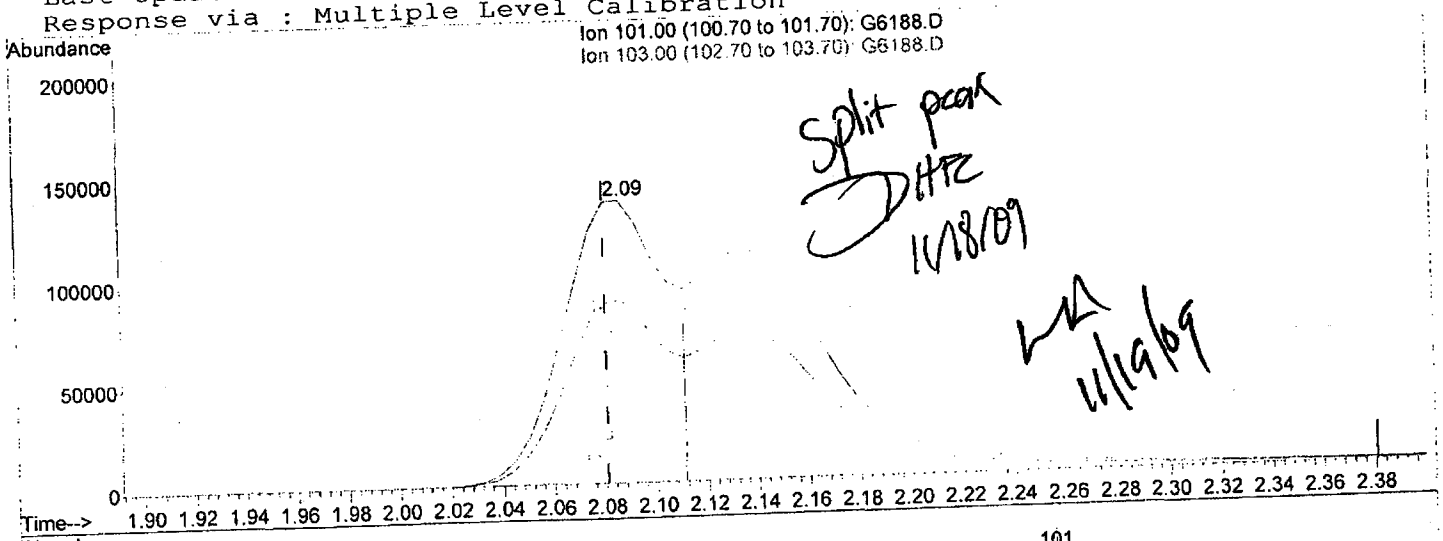


Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\111809\G6188.D
Acq On : 18 Nov 2009 15:00
Sample : RK91820-CAL6
Misc : VSTD 100
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:32 2009

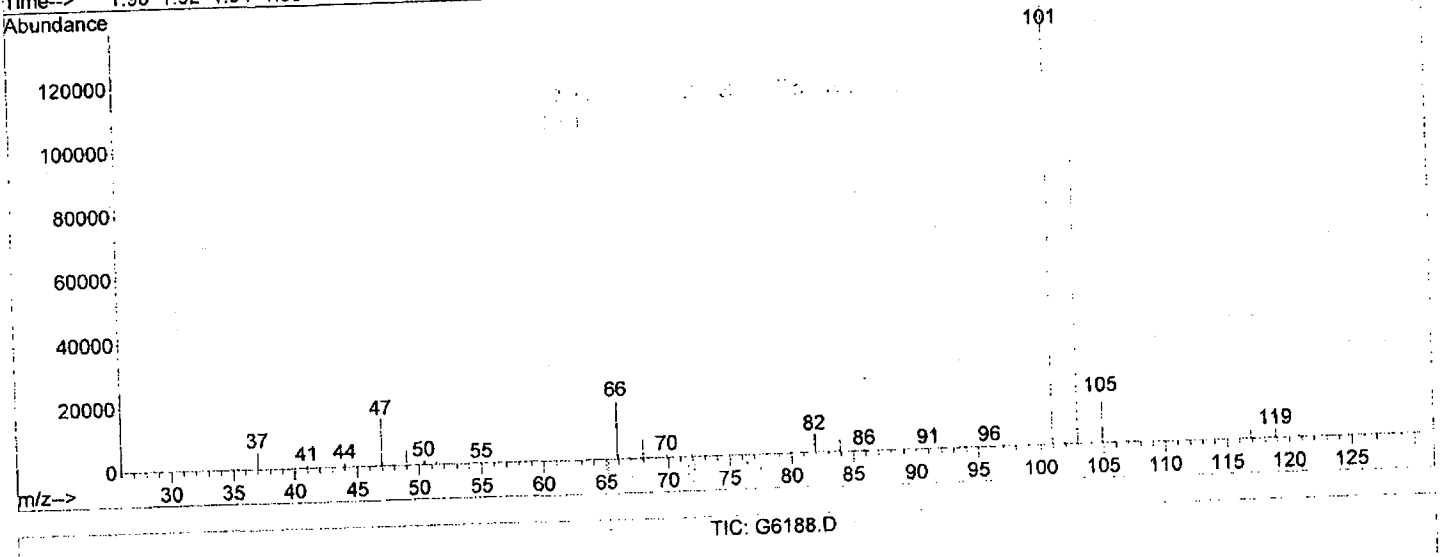
Vial: 8
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Multiple Level Calibration



Split peak DHC 11/18/09

LA 11/19/09



TIC: G6188.D

(7) C275 Trichlorofluoromethane (T)

2.09min (+0.006) 47.49ug/L

response 390208

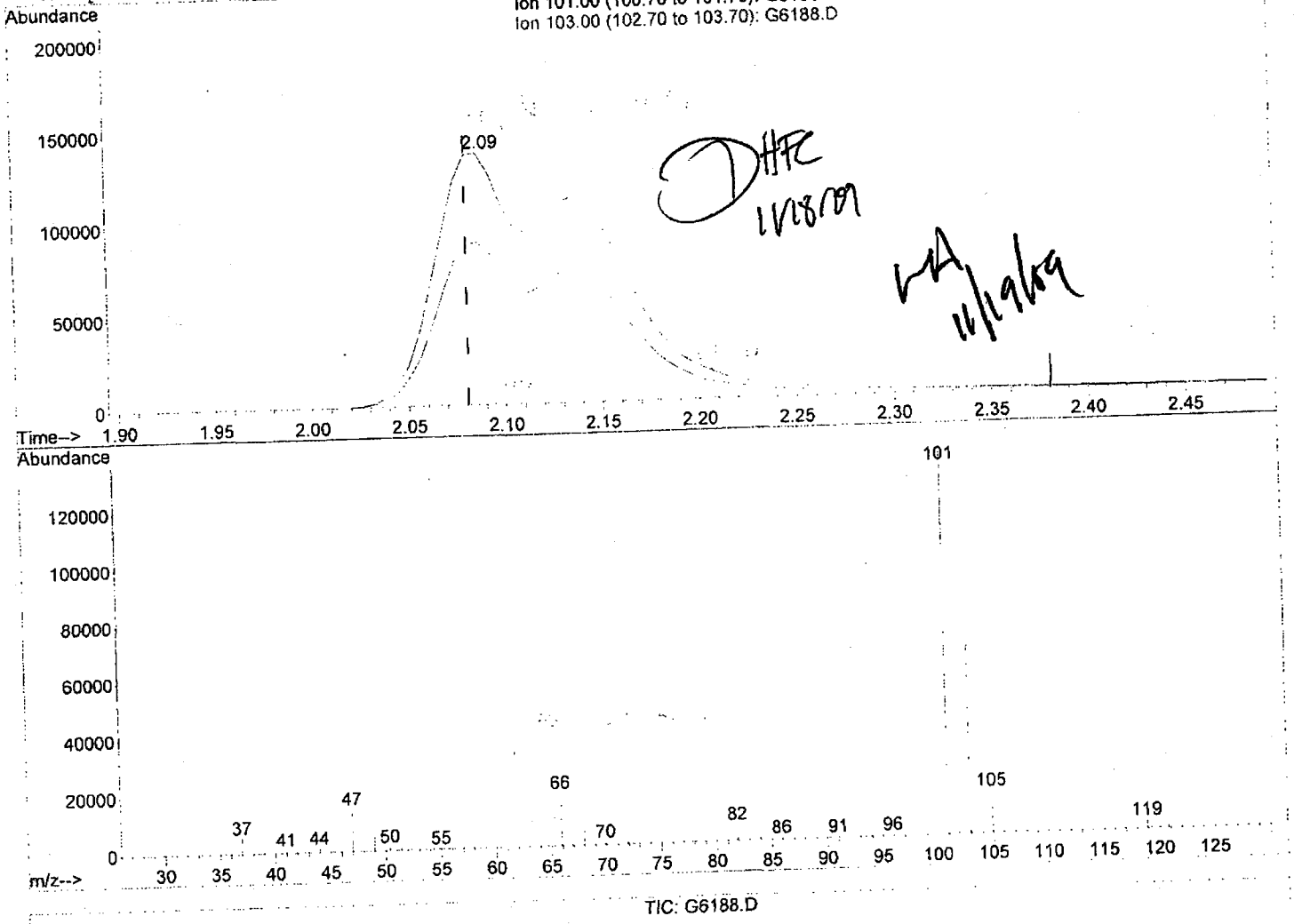
Ion	Exp%	Act%
101.00	100	100
103.00	64.90	64.60
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\111809\G6188.D
Acq On : 18 Nov 2009 15:00
Sample : RK91820-CAL6
Misc : VSTD 100
MS Integration Params: RTEINT.P
Quant Time: Nov 19 10:09:32 2009

Vial: 8
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Thu Nov 19 10:04:11 2009
Response via : Multiple Level Calibration



(7) C275 Trichlorofluoromethane (T)

2.09min (+0.006) 99.20ug/L m

response 815089

Ion	Exp%	Act%
101.00	100	100
103.00	64.90	64.60
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112309\G6318.D Vial: 4
Acq On : 23 Nov 2009 8:33 Operator: RJ
Sample : 9K23004-~~BS~~1SCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P Results File: R9K1805-SIXPT.RES
Quant Time: Nov 23 09:32:29 2009

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 07:43:16 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112309\G6316.D (23 Nov 2009 7:25)

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) CI10 1,4-Difluorobenzene	5.45	114	327808	25.00 ug/L	0.00 101.49%
43) CI20 Chlorobenzene-D5	8.32	82	167900	25.00 ug/L	0.00 102.95%
63) CI30 1,4-Dichlorobenzene-	10.73	152	165868	25.00 ug/L	0.00 105.54%
System Monitoring Compounds					
26) CS87 Dibromofluoromethane	4.75	111	97360	24.86 ug/L	0.00
Spiked Amount 25.000 Range 70 - 130			Recovery = 99.44%		
31) CS15 1,2-Dichloroethane-D	5.06	65	106593	23.71 ug/L	0.00
Spiked Amount 25.000 Range 66 - 137			Recovery = 94.84%		
44) CS05 Toluene-D8	6.84	98	389405	24.36 ug/L	0.00
Spiked Amount 25.000 Range 71 - 126			Recovery = 97.44%		
62) CS10 p-Bromofluorobenzene	9.58	174	121012	24.01 ug/L	0.00
Spiked Amount 25.000 Range 73 - 120			Recovery = 96.04%		
Target Compounds					Qvalue
2) C290 Dichlorodifluorometh	1.27	85	78208	17.96 ug/L	# 100
3) C010 Chloromethane	1.40	50	94519	19.40 ug/L	99
4) C020 Vinyl chloride	1.51	62	103405	21.72 ug/L	88
5) C015 Bromomethane	1.78	94	32287	26.70 ug/L	89
6) C025 Chloroethane	1.88	64	70059	23.79 ug/L	89
7) C275 Trichlorofluorometha	2.07	101	168410m	23.48 ug/L	100
8) C045 1,1-Dichloroethene	2.59	96	123834	27.04 ug/L	96
9) C030 Methylene chloride	3.09	84	137036	25.89 ug/L	92
10) C040 Carbon disulfide	2.78	76	347612	33.82 ug/L	100
11) C036 Acrolein	2.55	56	50477	342.47 ug/L	98
12) C038 Acrylonitrile	3.37	53	176659	134.45 ug/L	92
13) C035 Acetone	2.71	43	157188	133.77 ug/L	98
14) C300 Acetonitrile	3.00	41	461980	997.35 ug/L	98
15) C276 Iodomethane	2.75	142	142858	21.67 ug/L	98
16) C291 1,1,2-Trichloro-1,2,	2.61	101	98100	30.93 ug/L	98
17) C962 T-butyl Methyl Ether	3.32	73	320246	27.41 ug/L	96
18) C057 trans-1,2-Dichloroet	3.32	96	145047	25.81 ug/L	100
19) C255 Methyl Acetate	3.00	43	130887	26.06 ug/L	96
20) C050 1,1-Dichloroethane	3.73	63	252405	24.93 ug/L	99
21) C125 Vinyl Acetate	3.79	43	856965	117.60 ug/L	97
22) C051 2,2-Dichloropropane	4.26	77	151270	24.49 ug/L	95
23) C056 cis-1,2-Dichloroethe	4.29	96	153281	24.93 ug/L	99
24) C272 Tetrahydrofuran	4.56	42	149616	124.98 ug/L	91
25) C222 Bromochloromethane	4.52	128	64809	23.49 ug/L	97
27) C060 Chloroform	4.60	83	243362	24.79 ug/L	98
28) C115 1,1,1-Trichloroethan	4.71	97	205260	25.24 ug/L	97
29) C120 Carbon tetrachloride	4.85	117	166893	24.76 ug/L	99
30) C116 1,1-Dichloropropene	4.87	75	192891	25.82 ug/L	98
32) C165 Benzene	5.07	78	548824	24.82 ug/L	99
33) C065 1,2-Dichloroethane	5.13	62	166889	23.41 ug/L	98
34) C110 2-Butanone	4.33	43	224301	128.57 ug/L	93
35) C256 Cyclohexane	4.73	56	235394	30.98 ug/L	95
36) C150 Trichloroethene	5.68	95	137925	24.96 ug/L	94
37) C140 1,2-Dichloropropane	5.91	63	126100	23.83 ug/L	100
38) C278 Dibromomethane	6.05	93	64562	22.89 ug/L	98

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112309\G6318.D Vial: 4
Acq On : 23 Nov 2009 8:33 Operator: RJ
Sample : 9K23004-~~BS1~~SCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 09:32:29 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 07:43:16 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112309\G6316.D (23 Nov 2009 7:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.20	83	153179	23.85 ug/L	100
40) C161	2-Chloroethylvinyl E	6.48	63	53372	108.07 ug/L	96
41) C012	Methylcyclohexane	5.81	83	252018	30.33 ug/L	97
42) C145	cis-1,3-Dichloroprop	6.62	75	184274	23.69 ug/L	100
45) C230	Toluene	6.91	92	338231	23.53 ug/L	94
46) C170	trans-1,3-Dichloropr	7.18	75	158252	22.86 ug/L	99
47) C284	Ethyl Methacrylate	7.24	69	148871	27.31 ug/L #	96
48) C160	1,1,2-Trichloroethan	7.37	83	77793	22.35 ug/L	99
49) C210	4-Methyl-2-pentanone	6.77	43	563684	122.88 ug/L	96
50) C220	Tetrachloroethene	7.45	166	147483	23.93 ug/L	98
51) C221	1,3-Dichloropropane	7.54	76	175738	22.32 ug/L	100
52) C155	Dibromochloromethane	7.77	129	98490	21.96 ug/L	100
53) C163	1,2-Dibromoethane	7.87	107	92219	22.00 ug/L	95
54) C215	2-Hexanone	7.61	43	400287	123.94 ug/L	96
55) C235	Chlorobenzene	8.35	112	378811	23.68 ug/L	99
56) C281	1,1,1,2-Tetrachloroe	8.45	131	124304	23.56 ug/L	99
57) C240	Ethylbenzene	8.45	91	679011	24.59 ug/L	99
58) C246	m,p-Xylene	8.57	106	526980	49.08 ug/L	98
59) C247	o-Xylene	8.99	106	257619	24.33 ug/L	98
60) C245	Styrene	9.02	104	418354	29.80 ug/L	99
61) C180	Bromoform	9.27	173	52881	17.47 ug/L	96
64) C966	Isopropylbenzene	9.38	105	693808	24.65 ug/L	98
65) C301	Bromobenzene	9.73	156	153580	22.70 ug/L	94
66) C225	1,1,2,2-Tetrachloroe	9.78	83	118299	22.06 ug/L	96
67) C282	1,2,3-Trichloropropa	9.81	110	32797	19.40 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.82	51	63129	72.22 ug/L #	16
69) C302	n-Propylbenzene	9.81	91	815868	24.33 ug/L	95
70) C303	2-Chlorotoluene	9.91	126	158923	23.96 ug/L	100
71) C289	4-Chlorotoluene	10.03	126	160615	23.69 ug/L	100
72) C304	1,3,5-Trimethylbenze	9.99	105	579476	24.88 ug/L	98
73) C306	tert-Butylbenzene	10.31	134	130214	24.46 ug/L #	94
74) C307	1,2,4-Trimethylbenze	10.37	105	573257	25.28 ug/L	99
75) C308	sec-Butylbenzene	10.52	105	730671	27.09 ug/L	98
76) C260	1,3-Dichlorobenzene	10.66	146	294012	23.90 ug/L	99
77) C309	4-Isopropyltoluene	10.66	119	603981	25.14 ug/L	99
78) C267	1,4-Dichlorobenzene	10.74	146	303093	23.69 ug/L	98
79) C249	1,2-Dichlorobenzene	11.10	146	276097	23.88 ug/L	98
80) C310	n-Butylbenzene	11.05	91	562544	26.19 ug/L	99
81) C286	1,2-Dibromo-3-Chloro	11.82	75	15380	19.73 ug/L	82
82) C313	1,2,4-Trichlorobenze	12.51	180	182712	27.39 ug/L	100
83) C316	Hexachlorobutadiene	12.62	225	102529	27.96 ug/L	99
84) C314	Naphthalene	12.71	128	286264	24.03 ug/L	99
85) C934	1,2,3-Trichlorobenze	12.92	180	139645	26.82 ug/L	98

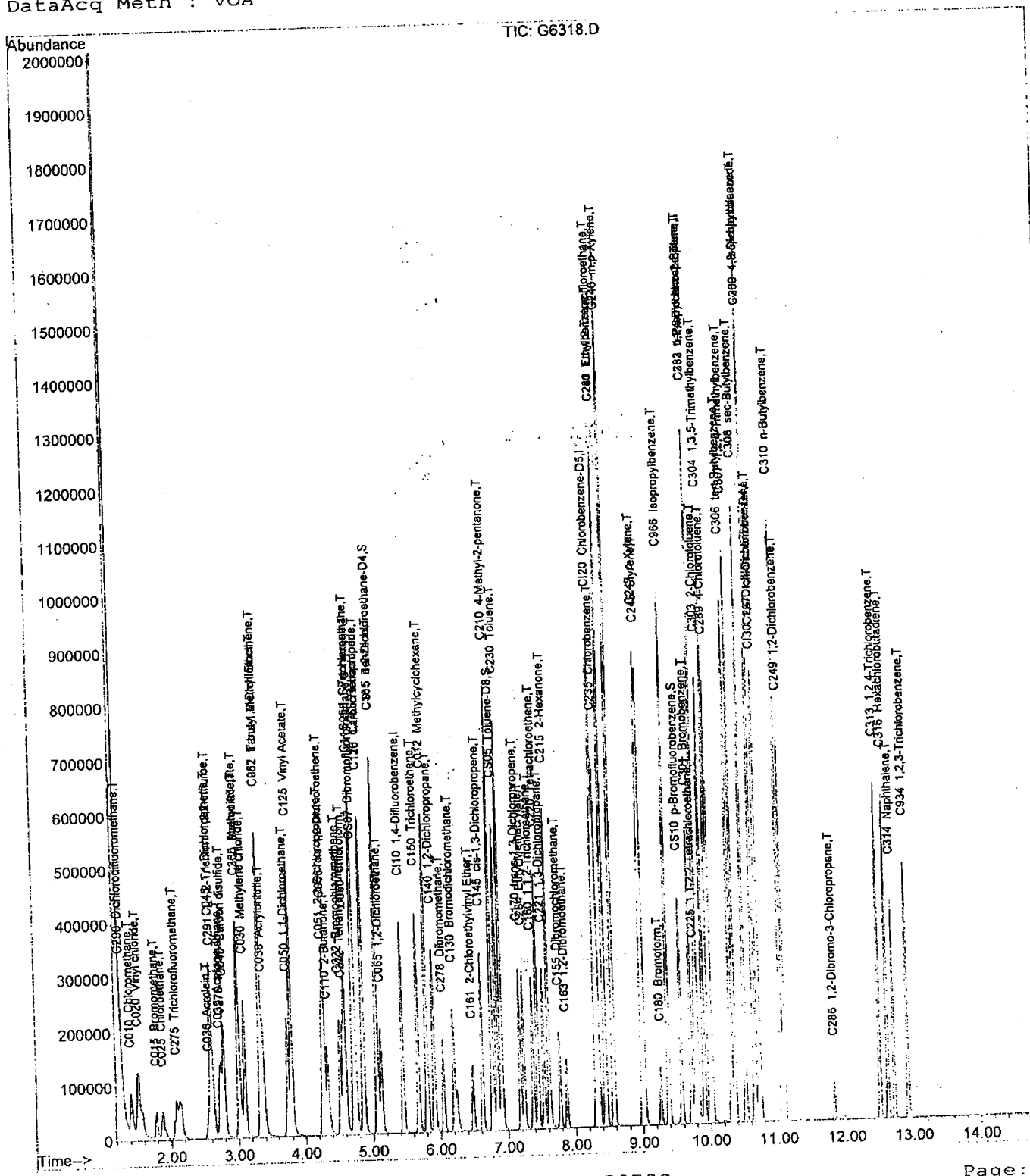
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112309\G6318.D
Acq On : 23 Nov 2009 8:33
Sample : 9K23004-~~BS1~~SOIL
Misc :
MS Integration Params: RTEINT.P

Vial: 4
Operator: RJ
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 23 09:32:29 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 07:43:16 2009
Response via : Initial Calibration
DataAcq Meth : VOA

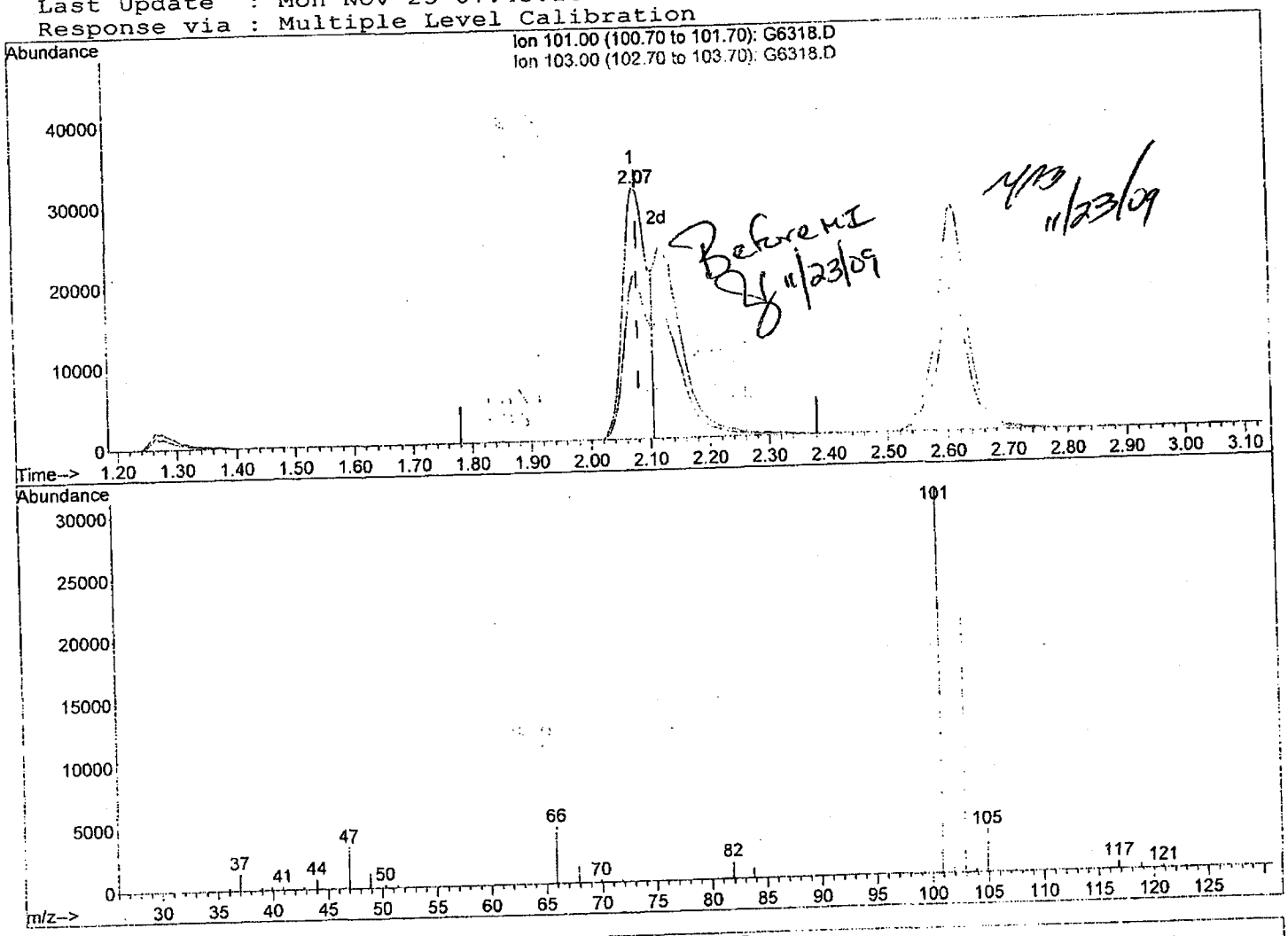


Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\112309\G6318.D
Acq On : 23 Nov 2009 8:33
Sample : 9K23004-BS1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 23 09:31:49 2009

Vial: 4
Operator: RJ
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 07:43:16 2009
Response via : Multiple Level Calibration



TIC: G6318.D

(7) C275 Trichlorofluoromethane (T)

2.07min (-0.006) 12.65ug/L

response 90711

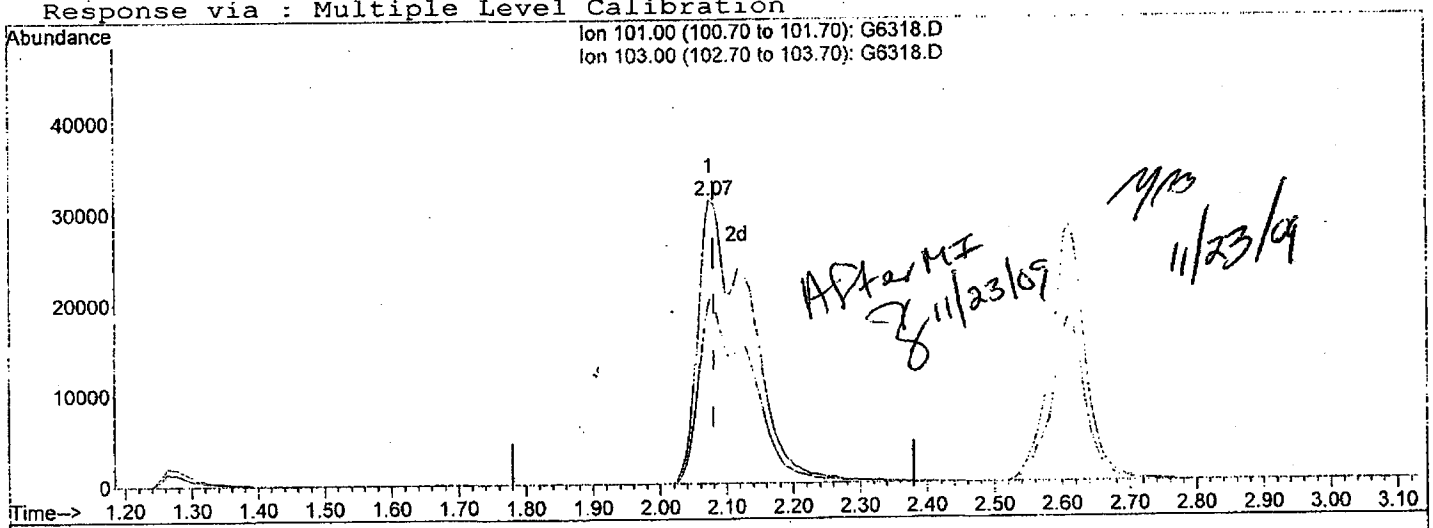
Ion	Exp%	Act%
101.00	100	100
103.00	64.90	65.16
0.00	0.00	0.00
0.00	0.00	0.00

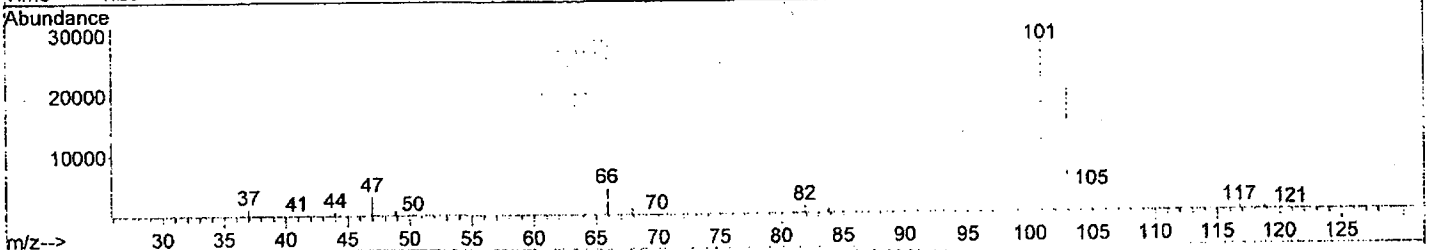
Quantitation Report (Qedit)

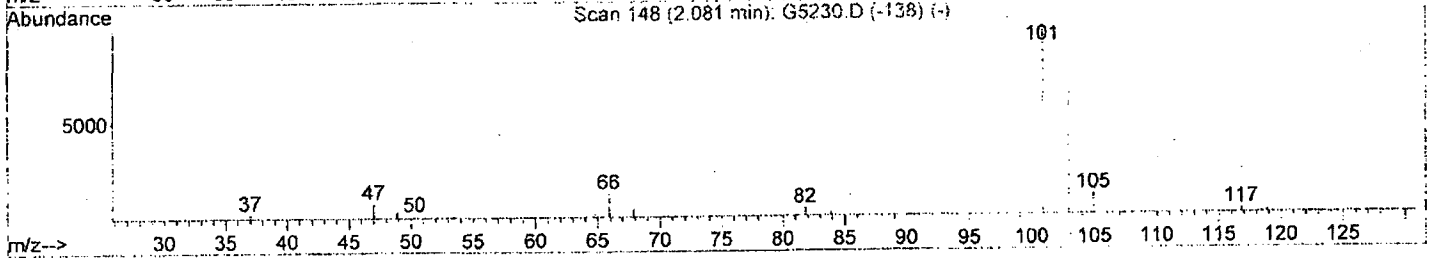
Data File : D:\MSDChem\G\Data\112309\G6318.D
Acq On : 23 Nov 2009 8:33
Sample : 9K23004-BS1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 23 09:31:49 2009

Vial: 4
Operator: RJ
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 07:43:16 2009
Response via : Multiple Level Calibration







TIC: G6318.D

(7) C275 Trichlorofluoromethane (T)

2.07min (-0.006) 23.48ug/L m

response 168410

Ion	Exp%	Act%
101.00	100	100
103.00	64.90	65.16
0.00	0.00	0.00
0.00	0.00	0.00

Form 6

INITIAL CALIBRATION DATA

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9K2009

SDG:

Project: Arcadis G&M, Inc. - NY9A8463.4

Instrument: HP5973S

Calibration Date: 11/23/09 15:15

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1-Trichloroethane	1	0.4165394	5	0.411974	10	0.412839	25	0.4376318	50	0.4486649	100	0.4396004
1,1,2,2-Tetrachloroethane	1	0.5634387	5	0.5383823	10	0.5959214	25	0.5925844	50	0.5795329	100	0.5904808
1,1,2-Trichloroethane	1	0.4017067	5	0.3711456	10	0.408416	25	0.3986526	50	0.3913192	100	0.3810036
1,1,2-Trichlorotrifluoroethane	1	0.2906355	5	0.2797406	10	0.2721881	25	0.2707832	50	0.2668202	100	0.2533592
1,1-Dichloroethane	1	0.5925374	5	0.545618	10	0.5432135	25	0.5452351	50	0.5529874	100	0.5337865
1,1-Dichloroethene	1	0.2833155	5	0.2634664	10	0.2599885	25	0.2618908	50	0.2618104	100	0.2507469
1,2,4-Trichlorobenzene	1	0.6590725	5	0.6034958	10	0.6431471	25	0.6367565	50	0.6558792	100	0.6576536
1,2-Dibromo-3-chloropropane	1	3.344828E-02	5	6.211165E-02	10	7.453114E-02	25	8.977546E-02	50	9.643959E-02	100	0.1098384
1,2-Dibromoethane (EDB)	1	0.451188	5	0.4455722	10	0.4763292	25	0.48761	50	0.4797291	100	0.4760597
1,2-Dichlorobenzene	1	1.322149	5	1.190567	10	1.193411	25	1.176562	50	1.1697	100	1.101874
1,2-Dichloroethane	1	0.4449282	5	0.4038048	10	0.4100986	25	0.4100681	50	0.4052758	100	0.390443
1,2-Dichloroethane-d4	1	0.3943248	5	0.3509422	10	0.3461024	25	0.3356523	50	0.3479907	100	0.3544677
1,2-Dichloroethene, Total	2	0.3534283	10	0.3089099	20	0.3078065	50	0.3085318	100	0.3091976	200	0.299514
1,2-Dichloropropane	1	0.3317548	5	0.3110324	10	0.3117159	25	0.3166256	50	0.3178469	100	0.3091264
1,3-Dichlorobenzene	1	1.405063	5	1.249115	10	1.263869	25	1.216925	50	1.208631	100	1.124386
1,4-Dichlorobenzene	1	1.453587	5	1.282209	10	1.283801	25	1.2458	50	1.230954	100	1.17425
2-Butanone (MEK)	5	0.1229886	25	0.1171928	50	0.1385956	125	0.1357817	250	0.1275126	500	0.1363125
2-Hexanone	5	0.2656452	25	0.2862896	50	0.3496007	125	0.3477389	250	0.3287873	500	0.3468092
4-Bromofluorobenzene	1	0.7210642	5	0.6229195	10	0.6316883	25	0.6920878	50	0.6766028	100	0.6729287
4-Methyl-2-pentanone (MIBK)	5	0.4161448	25	0.4121405	50	0.5030194	125	0.5013529	250	0.4783063	500	0.4931518
Acetone	5	9.257562E-02	25	7.935795E-02	50	8.920499E-02	125	8.708346E-02	250	8.264886E-02	500	0.0862762
Benzene	1	1.466099	5	1.329194	10	1.303682	25	1.297567	50	1.294062	100	1.227175
Bromodichloromethane	1	0.2731948	5	0.2727898	10	0.299378	25	0.3319689	50	0.350201	100	0.3552426
Bromoform	1	0.1223689	5	0.1617099	10	0.1883643	25	0.2276717	50	0.2664452	100	0.2970918
Bromomethane	1	0.1012068	5	9.846645E-02	10	8.970278E-02	25	9.060341E-02	50	9.477435E-02	100	8.993265E-02
Carbon disulfide	1	0.5802526	5	0.5601097	10	0.5797495	25	0.6336116	50	0.6711595	100	0.6700199
Carbon Tetrachloride	1	0.3102404	5	0.3249213	10	0.3385413	25	0.3611719	50	0.3815772	100	0.3773567
Chlorobenzene	1	1.753598	5	1.624427	10	1.598355	25	1.567018	50	1.566879	100	1.501553
Chlorodibromomethane	1	0.274657	5	0.3152895	10	0.3552252	25	0.4093186	50	0.4499137	100	0.4676129
Chloroethane	1	6.403402E-02	5	5.541463E-02	10	0.0526765	25	0.0529672	50	5.299871E-02	100	5.052014E-02
Chloroform	1	0.5663128	5	0.508645	10	0.5119005	25	0.5108946	50	0.5139963	100	0.4931452
Chloromethane	1	0.4401543	5	0.4349939	10	0.4006708	25	0.4079524	50	0.4053297	100	0.3882377
cis-1,2-Dichloroethene	1	0.3727467	5	0.323485	10	0.3235007	25	0.3237578	50	0.3230522	100	0.3131319
cis-1,3-Dichloropropene	1	0.3523144	5	0.3635743	10	0.4031911	25	0.4338151	50	0.4550939	100	0.4564565
Cyclohexane	1	0.6020852	5	0.6023279	10	0.5784296	25	0.5812567	50	0.5812558	100	0.5558086
Dichlorodifluoromethane	1	0.3398386	5	0.3512372	10	0.3263291	25	0.3267426	50	0.3226698	100	0.3087669
Ethylbenzene	1	3.100469	5	2.912417	10	2.922436	25	2.873841	50	2.879097	100	2.742407
Isopropylbenzene	1	2.991266	5	2.823993	10	2.859617	25	2.827332	50	2.836189	100	2.685029
Methyl Acetate	1	0.3318821	5	0.3001957	10	0.33966	25	0.3365386	50	0.3175949	100	0.3327824
Methyl tert-Butyl Ether	1	0.681905	5	0.6325296	10	0.6670073	25	0.6861073	50	0.6897104	100	0.7194928
Methylcyclohexane	1	0.6203534	5	0.6157423	10	0.6127155	25	0.6145973	50	0.6096043	100	0.5867063
Methylene Chloride	1	0.3836949	5	0.3167393	10	0.3168258	25	0.3046151	50	0.3020515	100	0.2897975
Styrene	1	1.49663	5	1.492964	10	1.542555	25	1.567149	50	1.557551	100	1.493182
Tetrachloroethene	1	0.6898695	5	0.6455607	10	0.6375282	25	0.6224798	50	0.6209075	100	0.5891626

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9K2009

SDG:

Project: Arcadis G&M, Inc. - NY9A8463.4

Instrument: HP5973S

Calibration Date: 11/23/09 15:15

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Toluene	1	1.715351	5	1.556576	10	1.553591	25	1.525978	50	1.512744	100	1.430929
Toluene-d8	1	2.367333	5	2.181591	10	2.164623	25	2.124639	50	2.210638	100	2.221476
trans-1,2-Dichloroethene	1	0.3341099	5	0.2943349	10	0.2921123	25	0.2933057	50	0.295343	100	0.2858962
trans-1,3-Dichloropropene	1	0.5352106	5	0.5716158	10	0.6360419	25	0.7047455	50	0.749483	100	0.7561746
Trichloroethene	1	0.3419391	5	0.3152132	10	0.3084476	25	0.3125497	50	0.3142738	100	0.3006822
Trichlorofluoromethane	1	0.3845224	5	0.4035098	10	0.3434249	25	0.3626655	50	0.3734645	100	0.3436878
Vinyl acetate	5	0.4047383	25	0.4520608	50	0.5241315	125	0.5533227	250	0.5618297	500	0.5656142
Vinyl chloride	1	0.4325797	5	0.4073315	10	0.3732672	25	0.3797172	50	0.3833913	100	0.368508
Xylenes, total	3	1.183886	15	1.121883	30	1.117419	75	1.107421	150	1.096639	300	1.031256

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis G&M, Inc. - NY9A8463.4

Calibration: R9K2009

Instrument: HP5973S

Calibration Date: 11/23/09 15:15

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r^2	Quad COD	LIMIT	Q
1,1,1-Trichloroethane	0.4278749	3.728178	4.41	1.724867E-02			15	
1,1,2,2-Tetrachloroethane	0.5767234	3.849022	8.26	2.545302E-02			SPCC (0.3)	
1,1,2-Trichloroethane	0.3920406	3.542228	6.47	7.957117E-03			15	
1,1,2-Trichlorotrifluoroethane	0.2722545	4.595374	2.56	1.527404E-02			15	
1,1-Dichloroethane	0.5522296	3.745763	3.6	1.455773E-02			SPCC (0.1)	
1,1-Dichloroethene	0.2635364	4.062331	2.58	0.0147416			CCC (30)	
1,2,4-Trichlorobenzene	0.6426675	3.291867	10.7	0.0142798			15	
1,2-Dibromo-3-chloropropane	7.769075E-02	35.20841	10.04833	3.847579E-02	0.99822		0.99	
1,2-Dibromoethane (EDB)	0.4694147	3.60282	6.853333	7.258995E-02			15	
1,2-Dichlorobenzene	1.192377	6.024395	9.38	2.144103E-02			15	
1,2-Dichloroethane	0.4107698	4.435279	4.74	8.371851E-03			15	
1,2-Dichloroethane-d4	0.3549133	5.727076	4.69	2.144103E-02			15	
1,2-Dichloroethene, Total	0.3145647	6.163914	4.06	2.452584E-02			15	
1,2-Dichloropropane	0.3163503	2.612626	5.36	1.480693E-02			CCC (30)	
1,3-Dichlorobenzene	1.244665	7.420411	8.991666	4.931148E-02			15	
1,4-Dichlorobenzene	1.278434	7.412025	9.07	1.658642E-02			15	
2-Butanone (MEK)	0.1297306	6.595835	4.106667	0.1993097			15	
2-Hexanone	0.3208118	11.26343	6.635	8.370862E-02			15	
4-Bromofluorobenzene	0.6695486	5.520364	8.12	2.452584E-02			15	
4-Methyl-2-pentanone (MIBK)	0.4673526	9.019505	6.005	9.045991E-02			15	
Acetone	8.619118E-02	5.439111	2.721667	0.1505239			15	
Benzene	1.31963	6.013542	4.69	2.144103E-02			15	
Bromodichloromethane	0.3137959	11.84802	5.58	1.791896E-02			15	
Bromoform	0.2106086	31.17933	7.89	6.057507E-03	0.99818		SPCC (0.1)	
Bromomethane	9.411441E-02	5.182631	1.806667	0.2852295			15	
Carbon disulfide	0.6158171	7.950739	2.76	5.142069E-03			15	
Carbon Tetrachloride	0.3489681	8.310209	4.52	2.281919E-02			15	
Chlorobenzene	1.601972	5.300081	7.21	6.933966E-03			SPCC (0.3)	
Chlorodibromomethane	0.3786695	20.21958	6.77	1.815745E-02	0.99961		0.99	
Chloroethane	5.476853E-02	8.759186	1.89	8.565379E-03			15	
Chloroform	0.5174824	4.843842	4.32	1.350901E-02			CCC (30)	
Chloromethane	0.4128898	4.928554	1.478333	0.2767626			SPCC (0.1)	
cis-1,2-Dichloroethene	0.3299457	6.477298	4.06	2.452584E-02			15	
cis-1,3-Dichloropropene	0.4107409	11.04196	5.9	9.245392E-03			15	
Cyclohexane	0.5835273	2.970702	4.42	2.262167E-02			15	
Dichlorodifluoromethane	0.329264	4.449545	1.29	0.0147416			15	
Ethylbenzene	2.905111	3.974092	7.27	1.985362E-02			CCC (30)	
Isopropylbenzene	2.837238	3.44136	7.97	6.953822E-03			15	
Methyl Acetate	0.3264423	4.571629	2.975	0.1829701			15	
Methyl tert-Butyl Ether	0.6794587	4.222381	3.251667	0.1253833			15	
Methylcyclohexane	0.6099532	1.955649	5.276667	9.846481E-02			15	
Methylene Chloride	0.318954	10.43829	3.043333	0.1704422			15	
Styrene	1.525005	2.269301	7.705	7.028487E-02			15	
Tetrachloroethene	0.6342514	5.267864	6.53	1.436055E-02			15	
Toluene	1.549195	6.023285	6.12	1.277828E-02			CCC (30)	
Toluene-d8	2.211717	3.783955	6.07	3.845082E-03			15	
trans-1,2-Dichloroethene	0.2991837	5.826227	3.25	0			15	
trans-1,3-Dichloropropene	0.6588786	14.1091	6.32	9.234004E-03			15	
Trichloroethene	0.3155176	4.434016	5.17	7.356541E-03			15	
Trichlorofluoromethane	0.3685458	6.404336	2.098333	0.1932744			15	

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9K2009

SDG:

Project: Arcadis G&M, Inc. - NY9A8463.4

Instrument: HP5973S

Calibration Date: 11/23/09 15:15

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r^2	Quad COD	LIMIT	Q
Vinyl acetate	0.5102829	13.08524	3.65	2.051615E-02			15	
Vinyl chloride	0.3907991	6.268824	1.53	1.277828E-02			CCC (30)	
Xylenes, total	1.109751	4.421984	7.683333	6.877428E-02			15	

Response Factor Report HP5973S

Method Path : D:\MSDCHEM\S\METHODS\82605MLLOW\
Method File : R9K2009-SIXPT.M
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:49:59 2009
Response Via : Initial Calibration

Calibration Files
1 =S1062.D 2 =S1063.D 3 =S1064.D
4 =S1065.D 5 =S1066.D 6 =S1067.D

			Compound	1	2	3	4	5	6	Avg	%RSD
1)	I	CI10	1,4-Difluoroben	ISTD							
2)	T	C290	Dichlorodiflu	0.340	0.351	0.326	0.327	0.323	0.309	0.329	4.45
3)	T	C010	Chloromethane	0.440	0.435	0.401	0.408	0.405	0.388	0.413	4.93
4)	T	C020	Vinyl chlorid	0.433	0.407	0.373	0.380	0.383	0.369	0.391	6.27
5)	T	C015	Bromomethane	0.101	0.098	0.090	0.091	0.095	0.090	0.094	5.18
6)	T	C025	Chloroethane	0.064	0.055	0.053	0.053	0.053	0.051	0.055	8.76
7)	T	C275	Trichlorofluo	0.385	0.404	0.343	0.363	0.373	0.344	0.369	6.40
8)	T	C045	1,1-Dichloroe	0.283	0.263	0.260	0.262	0.262	0.251	0.264	4.06
9)	T	C030	Methylene chl	0.384	0.317	0.317	0.305	0.302	0.290	0.319	10.44
10)	T	C040	Carbon disulf	0.580	0.560	0.580	0.634	0.671	0.670	0.616	7.95
11)	T	C036	Acrolein	0.027	0.025	0.028	0.028	0.027	0.028	0.027	4.75
12)	T	C038	Acrylonitrile	0.114	0.105	0.117	0.115	0.109	0.112	0.112	3.92
13)	T	C035	Acetone	0.093	0.079	0.089	0.087	0.083	0.086	0.086	5.44
14)	T	C300	Acetonitrile	0.050	0.043	0.048	0.046	0.043	0.043	0.045	6.49
15)	T	C276	Iodomethane	0.371	0.404	0.340	0.379	0.386	0.385	0.378	5.63
16)	T	C291	1,1,2-Trichlo	0.291	0.280	0.272	0.271	0.267	0.253	0.272	4.60
17)	T	C962	T-butyl Methy	0.682	0.633	0.667	0.686	0.690	0.719	0.679	4.22
18)	T	C057	trans-1,2-Dic	0.334	0.294	0.292	0.293	0.295	0.286	0.299	5.83
19)	T	C255	Methyl Acetat	0.332	0.300	0.340	0.337	0.318	0.333	0.326	4.57
20)	T	C050	1,1-Dichloroe	0.593	0.546	0.543	0.545	0.553	0.534	0.552	3.75
21)	T	C125	Vinyl Acetate	0.405	0.452	0.524	0.553	0.562	0.566	0.510	13.09
22)	T	C051	2,2-Dichlorop	0.320	0.318	0.328	0.352	0.371	0.373	0.344	7.26
23)	T	C056	cis-1,2-Dichl	0.373	0.323	0.324	0.324	0.323	0.313	0.330	6.48
24)	T	C272	Tetrahydrofur	0.095	0.079	0.090	0.089	0.084	0.090	0.088	6.45
25)	T	C222	Bromochlorome	0.145	0.144	0.143	0.148	0.144	0.140	0.144	1.74
26)	S	CS87	Dibromofluoro	0.253	0.264	0.263	0.271	0.282	0.290	0.270	5.02
27)	T	C060	Chloroform	0.566	0.509	0.512	0.511	0.514	0.493	0.517	4.84
28)	T	C115	1,1,1-Trichlo	0.417	0.412	0.413	0.438	0.449	0.440	0.428	3.73
29)	T	C120	Carbon tetrac	0.310	0.325	0.339	0.361	0.382	0.377	0.349	8.31
30)	T	C116	1,1-Dichlorop	0.438	0.414	0.415	0.422	0.421	0.407	0.419	2.57
31)	S	CS15	1,2-Dichloroe	0.394	0.351	0.346	0.336	0.348	0.354	0.355	5.73
32)	T	C165	Benzene	1.466	1.329	1.304	1.298	1.294	1.227	1.320	6.01
33)	T	C065	1,2-Dichloroe	0.445	0.404	0.410	0.410	0.405	0.390	0.411	4.44
34)	T	C110	2-Butanone	0.123	0.117	0.139	0.136	0.128	0.136	0.130	6.60
35)	T	C256	Cyclohexane	0.602	0.602	0.578	0.581	0.581	0.556	0.584	2.97
36)	T	C150	Trichloroethe	0.342	0.315	0.308	0.313	0.314	0.301	0.316	4.43
37)	T	C140	1,2-Dichlorop	0.332	0.311	0.312	0.317	0.318	0.309	0.316	2.61
38)	T	C278	Dibromomethan	0.154	0.160	0.164	0.168	0.168	0.167	0.164	3.45
39)	T	C130	Bromodichloro	0.273	0.273	0.299	0.332	0.350	0.355	0.314	11.85
40)	T	C161	2-Chloroethyl	0.196	0.196	0.216	0.215	0.211	0.211	0.207	4.40
41)	T	C012	Methylcyclohe	0.620	0.616	0.613	0.615	0.610	0.587	0.610	1.96
42)	T	C145	cis-1,3-Dichl	0.352	0.364	0.403	0.434	0.455	0.456	0.411	11.04
43)	I	CI20	Chlorobenzene-D	ISTD							
44)	S	CS05	Toluene-D8	2.367	2.182	2.165	2.125	2.211	2.221	2.212	3.78
45)	T	C230	Toluene	1.715	1.557	1.554	1.526	1.513	1.431	1.549	6.02
46)	T	C170	trans-1,3-Dic	0.535	0.572	0.636	0.705	0.749	0.756	0.659	14.11
47)	T	C284	Ethyl Methacr	0.378	0.492	0.599	0.655	0.678	0.705	-----	
								L	M= 0.711	R=1.000	
									B= -0.042		
48)	T	C160	1,1,2-Trichlo	0.402	0.371	0.408	0.399	0.391	0.381	0.392	3.54
49)	T	C210	4-Methyl-2-pe	0.416	0.412	0.503	0.501	0.478	0.493	0.467	9.02
50)	T	C220	Tetrachloroet	0.690	0.646	0.638	0.622	0.621	0.589	0.634	5.27
51)	T	C221	1,3-Dichlorop	0.958	0.863	0.898	0.891	0.879	0.848	0.890	4.30
52)	T	C155	Dibromochloro	0.275	0.315	0.355	0.409	0.450	0.468	-----	
								L	M= 0.474	R=0.999	

Response Factor Report HP5973S

Method Path : D:\MSDCHEM\S\METHODS\82605MLLOW\
Method File : R9K2009-SIXPT.M
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:49:59 2009
Response Via : Initial Calibration

Calibration Files
1 =S1062.D 2 =S1063.D 3 =S1064.D
4 =S1065.D 5 =S1066.D 6 =S1067.D

										B= -0.037		
53)	T	C163	1,2-Dibromoet	0.451	0.446	0.476	0.488	0.480	0.476	0.469		3.60
54)	T	C215	2-Hexanone	0.266	0.286	0.350	0.348	0.329	0.347	0.321		11.26
55)	T	C235	Chlorobenzene	1.754	1.624	1.598	1.567	1.567	1.502	1.602		5.30
56)	T	C281	1,1,1,2-Tetra	0.397	0.418	0.456	0.482	0.504	0.491	0.458		9.33
57)	T	C240	Ethylbenzene	3.100	2.912	2.922	2.874	2.879	2.742	2.905		3.97
58)	T	C246	m,p-Xylene	1.209	1.149	1.141	1.126	1.114	1.041	1.130		4.82
59)	T	C247	o-Xylene	1.134	1.067	1.070	1.071	1.062	1.011	1.069		3.66
60)	T	C245	Styrene	1.497	1.493	1.543	1.567	1.558	1.493	1.525		2.27
61)	T	C180	Bromoform	0.124	0.160	0.188	0.230	0.268	0.301	-----		
									L	M= 0.306	R=0.996	
										B= -0.042		
62)	S	CS10	p-Bromofluoro	0.721	0.623	0.632	0.692	0.677	0.673	0.670		5.52
63)	I	CI30	1,4-Dichloroben	----------	----------	----------	ISTD	----------	----------	----------		
64)	T	C966	Isopropylbenz	2.991	2.824	2.860	2.827	2.836	2.685	2.837		3.44
65)	T	C301	Bromobenzene	0.658	0.637	0.650	0.634	0.638	0.609	0.638		2.63
66)	T	C225	1,1,2,2-Tetra	0.563	0.538	0.596	0.593	0.580	0.590	0.577		3.85
67)	T	C282	1,2,3-Trichlo	0.205	0.189	0.207	0.197	0.189	0.183	0.195		4.91
68)	T	C283	t-1,4-Dichlor	0.105	0.104	0.112	0.111	0.106	0.099	0.106		4.43
69)	T	C302	n-Propylbenze	3.584	3.562	3.651	3.613	3.573	3.317	3.550		3.34
70)	T	C303	2-Chlorotolue	0.697	0.645	0.648	0.650	0.640	0.610	0.648		4.35
71)	T	C289	4-Chlorotolue	0.670	0.659	0.671	0.661	0.665	0.624	0.658		2.64
72)	T	C304	1,3,5-Trimeth	2.352	2.333	2.368	2.361	2.343	2.267	2.337		1.56
73)	T	C306	tert-Butylben	0.527	0.522	0.529	0.532	0.530	0.507	0.525		1.79
74)	T	C307	1,2,4-Trimeth	2.298	2.219	2.319	2.288	2.280	2.200	2.267		2.06
75)	T	C308	sec-Butylbenz	2.803	2.763	2.848	2.864	2.836	2.746	2.810		1.69
76)	T	C260	1,3-Dichlorob	1.405	1.249	1.264	1.217	1.209	1.124	1.245		7.42
77)	T	C309	4-Isopropylto	2.463	2.427	2.545	2.537	2.508	2.411	2.482		2.29
78)	T	C267	1,4-Dichlorob	1.454	1.282	1.284	1.246	1.231	1.174	1.278		7.41
79)	T	C249	1,2-Dichlorob	1.322	1.191	1.193	1.177	1.170	1.102	1.192		6.02
80)	T	C310	n-Butylbenzen	2.030	1.990	2.137	2.144	2.146	2.118	2.094		3.21
81)	T	C286	1,2-Dibromo-3	0.033	0.062	0.075	0.090	0.096	0.110	-----		
									L	M= 0.111	R=0.996	
										B= -0.014		
82)	T	C313	1,2,4-Trichlo	0.659	0.603	0.643	0.637	0.656	0.658	0.643		3.29
83)	T	C316	Hexachlorobut	0.272	0.252	0.266	0.262	0.264	0.262	0.263		2.45
84)	T	C314	Naphthalene	1.187	1.121	1.443	1.447	1.434	1.641	1.379		13.91
85)	T	C934	1,2,3-Trichlo	0.563	0.545	0.599	0.587	0.588	0.600	0.580		3.76

Total Average %RSD 5.32

L = Linear LO = Linear+Origin Q = Quad QO = Quad+Origin R = Corr. Coef
(#) = Out of Range

R9K2009-SIXPT.M Mon Nov 23 17:52:12 2009 HP5973S

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1062.D Vial: 3
Acq On : 23 Nov 2009 15:15 Operator: RJ
Sample : RK91904-CAL1 Inst : HP5973S
Misc : VSTD 001 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:45:56 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	392760	25.00	ug/L	0.00 96.96%
43) CI20	Chlorobenzene-D5	7.19	82	209170	25.00	ug/L	0.00 94.90%
63) CI30	1,4-Dichlorobenzene-	9.05	152	212268	25.00	ug/L	0.00 95.25%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	3969	0.99	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	3.96%#	
31) CS15	1,2-Dichloroethane-D	4.69	65	6195	1.09	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	4.36%#	
44) CS05	Toluene-D8	6.07	98	19807	1.26	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	5.04%#	
62) CS10	p-Bromofluorobenzene	8.12	174	6033	1.27	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	5.08%#	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	5339	1.45	ug/L #	100
3) C010	Chloromethane	1.48	50	6915	1.07	ug/L	91
4) C020	Vinyl chloride	1.53	62	6796	1.15	ug/L	85
5) C015	Bromomethane	1.81	94	1590	1.35	ug/L	98
6) C025	Chloroethane	1.89	64	1006	1.14	ug/L #	37
7) C275	Trichlorofluorometha	2.10	101	6041	1.07	ug/L	95
8) C045	1,1-Dichloroethene	2.58	96	4451	1.15	ug/L	87
9) C030	Methylene chloride	3.04	84	6028	1.07	ug/L	87
10) C040	Carbon disulfide	2.76	76	9116	0.93	ug/L	95
11) C036	Acrolein	2.56	56	8483	25.56	ug/L	94
12) C038	Acrylonitrile	3.30	53	8944	4.49	ug/L	97
13) C035	Acetone	2.73	43	7272	4.36	ug/L	97
14) C300	Acetonitrile	2.99	41	31473	37.57	ug/L	96
15) C276	Iodomethane	2.73	142	5823	1.13	ug/L	94
16) C291	1,1,2-Trichloro-1,2,	2.56	101	4566	1.05	ug/L	91
17) C962	T-butyl Methyl Ether	3.26	73	10713	0.89	ug/L	98
18) C057	trans-1,2-Dichloroet	3.25	96	5249	1.15	ug/L	91
19) C255	Methyl Acetate	2.98	43	5214	1.12	ug/L #	88
20) C050	1,1-Dichloroethane	3.60	63	9309	1.03	ug/L	94
21) C125	Vinyl Acetate	3.65	43	31793	3.19	ug/L	100
22) C051	2,2-Dichloropropane	4.04	77	5028	0.93	ug/L	97
23) C056	cis-1,2-Dichloroethe	4.06	96	5856	1.14	ug/L	98
24) C272	Tetrahydrofuran	4.32	42	7497	4.99	ug/L	88
25) C222	Bromochloromethane	4.26	128	2276	1.03	ug/L	92
27) C060	Chloroform	4.32	83	8897	1.02	ug/L	97
28) C115	1,1,1-Trichloroethan	4.41	97	6544	1.02	ug/L	91
29) C120	Carbon tetrachloride	4.52	117	4874	0.96	ug/L	97
30) C116	1,1-Dichloropropene	4.54	75	6885	1.06	ug/L	97
32) C165	Benzene	4.69	78	23033	1.11	ug/L	97
33) C065	1,2-Dichloroethane	4.74	62	6990	1.00	ug/L	99
34) C110	2-Butanone	4.12	43	9661	4.35	ug/L	93
35) C256	Cyclohexane	4.42	56	9459	0.96	ug/L	99
36) C150	Trichloroethene	5.17	95	5372	1.13	ug/L	99
37) C140	1,2-Dichloropropane	5.36	63	5212	1.08	ug/L	86
38) C278	Dibromomethane	5.47	93	2418	0.94	ug/L	94

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1062.D Vial: 3
Acq On : 23 Nov 2009 15:15 Operator: RJ
Sample : RK91904-CAL1 Inst : HP5973S
Misc : VSTD 001 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:45:56 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	4292	0.82 ug/L		90
40) C161	2-Chloroethylvinyl E	5.79	63	15414	5.92 ug/L		95
41) C012	Methylcyclohexane	5.28	83	9746	1.09 ug/L		99
42) C145	cis-1,3-Dichloroprop	5.90	75	5535	0.90 ug/L		96
45) C230	Toluene	6.12	92	14352	1.27 ug/L		97
46) C170	trans-1,3-Dichloropr	6.32	75	4478	0.92 ug/L		98
47) C284	Ethyl Methacrylate	6.35	69	3164	0.76 ug/L	#	91
48) C160	1,1,2-Trichloroethan	6.47	83	3361	1.09 ug/L		95
49) C210	4-Methyl-2-pentanone	6.01	43	17409	4.49 ug/L		94
50) C220	Tetrachloroethene	6.53	166	5772	1.29 ug/L		96
51) C221	1,3-Dichloropropane	6.59	76	8016	1.21 ug/L		97
52) C155	Dibromochloromethane	6.77	129	2298	0.78 ug/L		92
53) C163	1,2-Dibromoethane	6.85	107	3775	1.09 ug/L		90
54) C215	2-Hexanone	6.64	43	11113	4.76 ug/L		96
55) C235	Chlorobenzene	7.21	112	14672	1.25 ug/L		99
56) C281	1,1,1,2-Tetrachloroe	7.28	131	3324	0.91 ug/L		84
57) C240	Ethylbenzene	7.27	91	25941	1.24 ug/L		98
58) C246	m,p-Xylene	7.36	106	20228	2.49 ug/L		93
59) C247	o-Xylene	7.69	106	9488	1.22 ug/L		91
60) C245	Styrene	7.70	104	12522	1.13 ug/L		97
61) C180	Bromoform	7.89	173	1039	0.60 ug/L		90
64) C966	Isopropylbenzene	7.97	105	25398	1.04 ug/L		95
65) C301	Bromobenzene	8.24	156	5585	1.03 ug/L		92
66) C225	1,1,2,2-Tetrachloroe	8.26	83	4784	0.79 ug/L		93
67) C282	1,2,3-Trichloropropa	8.30	110	1744	0.91 ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	4462	4.04 ug/L	#	31
69) C302	n-Propylbenzene	8.30	91	30434	0.99 ug/L		97
70) C303	2-Chlorotoluene	8.39	126	5921	1.08 ug/L		100
71) C289	4-Chlorotoluene	8.47	126	5688	1.01 ug/L		100
72) C304	1,3,5-Trimethylbenze	8.43	105	19973	0.97 ug/L		94
73) C306	tert-Butylbenzene	8.70	134	4475	1.09 ug/L	#	92
74) C307	1,2,4-Trimethylbenze	8.74	105	19513	0.96 ug/L		96
75) C308	sec-Butylbenzene	8.87	105	23801	1.02 ug/L		97
76) C260	1,3-Dichlorobenzene	8.99	146	11930	1.10 ug/L		97
77) C309	4-Isopropyltoluene	8.99	119	20913	1.08 ug/L		96
78) C267	1,4-Dichlorobenzene	9.07	146	12342	1.09 ug/L		98
79) C249	1,2-Dichlorobenzene	9.38	146	11226	1.07 ug/L		96
80) C310	n-Butylbenzene	9.33	91	17237	1.01 ug/L		95
81) C286	1,2-Dibromo-3-Chloro	10.04	75	284	0.32 ug/L	#	41
82) C313	1,2,4-Trichlorobenze	10.70	180	5596	1.04 ug/L		90
83) C316	Hexachlorobutadiene	10.81	225	2312	0.94 ug/L		94
84) C314	Naphthalene	10.91	128	10075	0.69 ug/L		96
85) C934	1,2,3-Trichlorobenze	11.11	180	4780	0.96 ug/L		90

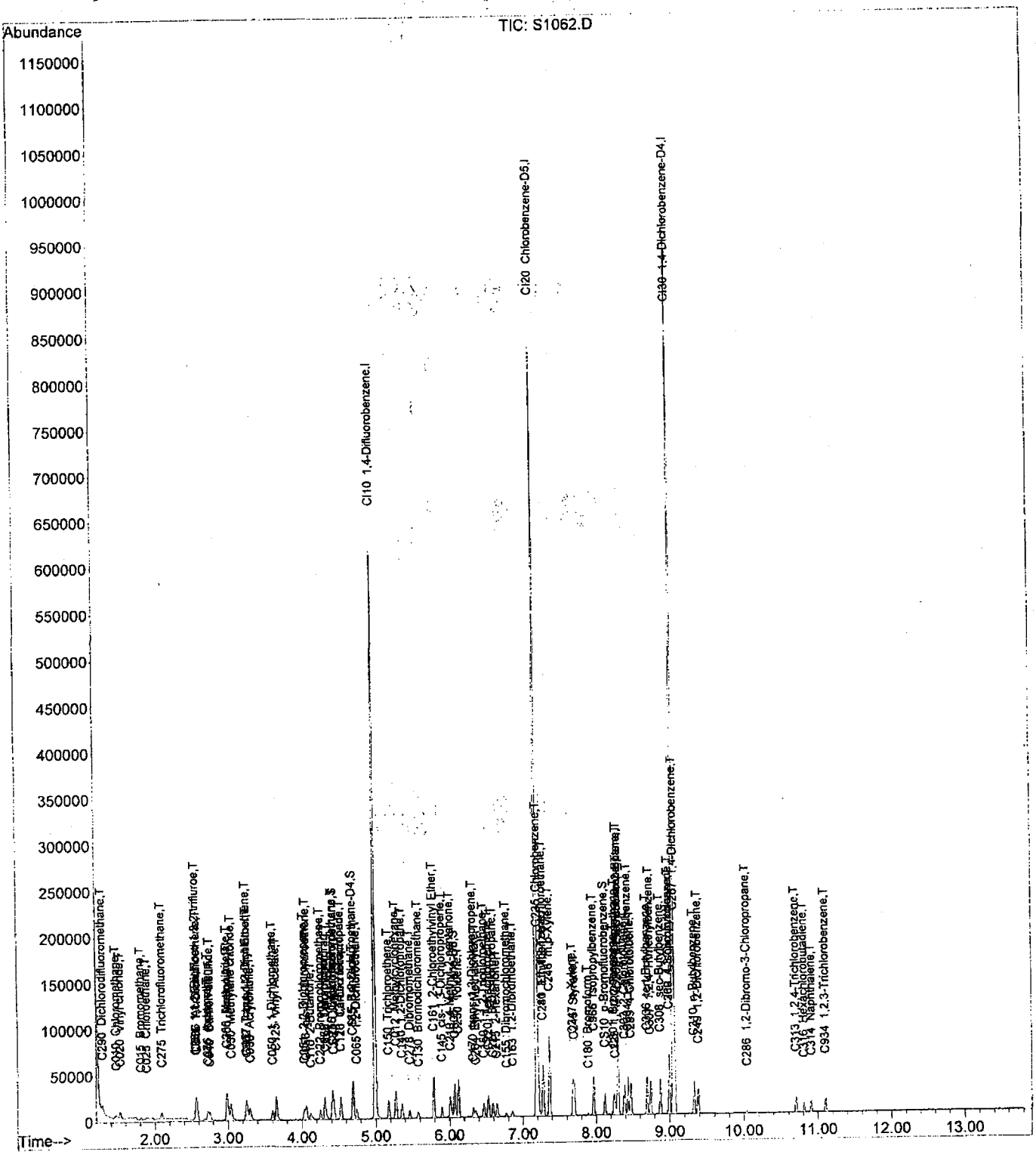
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1062.D
Acq On : 23 Nov 2009 15:15
Sample : RK91904-CAL1
Misc : VSTD 001
MS Integration Params: RTEINT.P

Vial: 3
Operator: RJ
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 23 17:45:56 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1063.D
Acq On : 23 Nov 2009 15:39
Sample : RK91904-CAL2
Misc : VSTD 005
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:47:02 2009

Vial: 4
Operator: RJ
Inst : HP5973S
Multiplr: 1.00

Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	389879	25.00	ug/L	0.00 96.25%
43) CI20	Chlorobenzene-D5	7.19	82	207587	25.00	ug/L	0.00 94.18%
63) CI30	1,4-Dichlorobenzene-	9.05	152	204873	25.00	ug/L	0.00 91.93%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	20615	5.20	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	20.80%#	
31) CS15	1,2-Dichloroethane-D	4.69	65	27365	4.83	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	19.32%#	
44) CS05	Toluene-D8	6.07	98	90574	5.79	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	23.16%#	
62) CS10	p-Bromofluorobenzene	8.12	174	25862	5.48	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	21.92%#	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	27388	7.51	ug/L #	100
3) C010	Chloromethane	1.47	50	33919	5.28	ug/L	98
4) C020	Vinyl chloride	1.53	62	31762	5.40	ug/L	89
5) C015	Bromomethane	1.81	94	7678	6.56	ug/L	84
6) C025	Chloroethane	1.89	64	4321	4.94	ug/L	87
7) C275	Trichlorofluorometha	2.10	101	31464	5.59	ug/L	100
8) C045	1,1-Dichloroethene	2.58	96	20544	5.35	ug/L	97
9) C030	Methylene chloride	3.04	84	24698	4.43	ug/L	91
10) C040	Carbon disulfide	2.76	76	43675	4.49	ug/L	100
11) C036	Acrolein	2.56	56	38372	116.45	ug/L	96
12) C038	Acrylonitrile	3.29	53	40845	20.66	ug/L	93
13) C035	Acetone	2.72	43	30940	18.68	ug/L	93
14) C300	Acetonitrile	2.98	41	134549	161.82	ug/L	99
15) C276	Iodomethane	2.73	142	31479	6.16	ug/L	99
16) C291	1,1,2-Trichloro-1,2,	2.56	101	21813	5.08	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	49322	4.13	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	22951	5.08	ug/L	96
19) C255	Methyl Acetate	2.98	43	23408	5.07	ug/L	100
20) C050	1,1-Dichloroethane	3.60	63	42545	4.74	ug/L	98
21) C125	Vinyl Acetate	3.65	43	176249	17.80	ug/L	97
22) C051	2,2-Dichloropropane	4.04	77	24826	4.62	ug/L	95
23) C056	cis-1,2-Dichloroethe	4.06	96	25224	4.97	ug/L	99
24) C272	Tetrahydrofuran	4.30	42	30753	20.61	ug/L	95
25) C222	Bromochloromethane	4.26	128	11234	5.12	ug/L	94
27) C060	Chloroform	4.32	83	39662	4.59	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	32124	5.04	ug/L	98
29) C120	Carbon tetrachloride	4.52	117	25336	5.02	ug/L	99
30) C116	1,1-Dichloropropene	4.54	75	32251	4.99	ug/L	95
32) C165	Benzene	4.69	78	103645	5.05	ug/L	100
33) C065	1,2-Dichloroethane	4.74	62	31487	4.56	ug/L	96
34) C110	2-Butanone	4.11	43	45691	20.71	ug/L	92
35) C256	Cyclohexane	4.42	56	46967	4.80	ug/L	98
36) C150	Trichloroethene	5.17	95	24579	5.20	ug/L	91
37) C140	1,2-Dichloropropane	5.36	63	24253	5.08	ug/L	100
38) C278	Dibromomethane	5.47	93	12502	4.87	ug/L	92

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1063.D Vial: 4
Acq On : 23 Nov 2009 15:39 Operator: RJ
Sample : RK91904-CAL2 Inst : HP5973S
Misc : VSTD 005 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:47:02 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	21271	4.12	ug/L		99
40) C161	2-Chloroethylvinyl E	5.78	63	76309	29.52	ug/L		95
41) C012	Methylcyclohexane	5.28	83	48013	5.41	ug/L		99
42) C145	cis-1,3-Dichloroprop	5.90	75	28350	4.63	ug/L		100
45) C230	Toluene	6.12	92	64625	5.76	ug/L		96
46) C170	trans-1,3-Dichloropr	6.32	75	23732	4.92	ug/L		98
47) C284	Ethyl Methacrylate	6.35	69	20422	4.97	ug/L	#	95
48) C160	1,1,2-Trichloroethan	6.47	83	15409	5.06	ug/L		96
49) C210	4-Methyl-2-pentanone	6.01	43	85555	22.21	ug/L		96
50) C220	Tetrachloroethene	6.53	166	26802	6.02	ug/L		96
51) C221	1,3-Dichloropropane	6.59	76	35838	5.47	ug/L		100
52) C155	Dibromochloromethane	6.77	129	13090	4.50	ug/L		94
53) C163	1,2-Dibromoethane	6.85	107	18499	5.37	ug/L		98
54) C215	2-Hexanone	6.64	43	59430	25.63	ug/L		94
55) C235	Chlorobenzene	7.21	112	67442	5.78	ug/L		100
56) C281	1,1,1,2-Tetrachloroe	7.28	131	17353	4.77	ug/L		97
57) C240	Ethylbenzene	7.27	91	120916	5.81	ug/L		98
58) C246	m,p-Xylene	7.36	106	95432	11.82	ug/L		99
59) C247	o-Xylene	7.68	106	44301	5.72	ug/L		95
60) C245	Styrene	7.71	104	61984	5.63	ug/L		91
61) C180	Bromoform	7.89	173	6626	3.86	ug/L		96
64) C966	Isopropylbenzene	7.97	105	115712	4.89	ug/L		97
65) C301	Bromobenzene	8.24	156	26103	4.97	ug/L		90
66) C225	1,1,2,2-Tetrachloroe	8.26	83	22060	3.78	ug/L		99
67) C282	1,2,3-Trichloropropa	8.30	110	7764	4.18	ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	21306	20.01	ug/L	#	39
69) C302	n-Propylbenzene	8.30	91	145942	4.91	ug/L		94
70) C303	2-Chlorotoluene	8.39	126	26429	5.00	ug/L		100
71) C289	4-Chlorotoluene	8.47	126	26995	4.95	ug/L		100
72) C304	1,3,5-Trimethylbenze	8.44	105	95576	4.82	ug/L		97
73) C306	tert-Butylbenzene	8.70	134	21391	5.40	ug/L	#	88
74) C307	1,2,4-Trimethylbenze	8.75	105	90936	4.63	ug/L		99
75) C308	sec-Butylbenzene	8.87	105	113231	5.02	ug/L		95
76) C260	1,3-Dichlorobenzene	8.99	146	51182	4.90	ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	99445	5.34	ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	52538	4.80	ug/L		98
79) C249	1,2-Dichlorobenzene	9.38	146	48783	4.83	ug/L		96
80) C310	n-Butylbenzene	9.33	91	81522	4.93	ug/L		96
81) C286	1,2-Dibromo-3-Chloro	10.05	75	2545	2.95	ug/L		85
82) C313	1,2,4-Trichlorobenze	10.70	180	24728	4.74	ug/L		97
83) C316	Hexachlorobutadiene	10.81	225	10344	4.35	ug/L		98
84) C314	Naphthalene	10.90	128	45934	3.28	ug/L		99
85) C934	1,2,3-Trichlorobenze	11.10	180	22344	4.64	ug/L		99

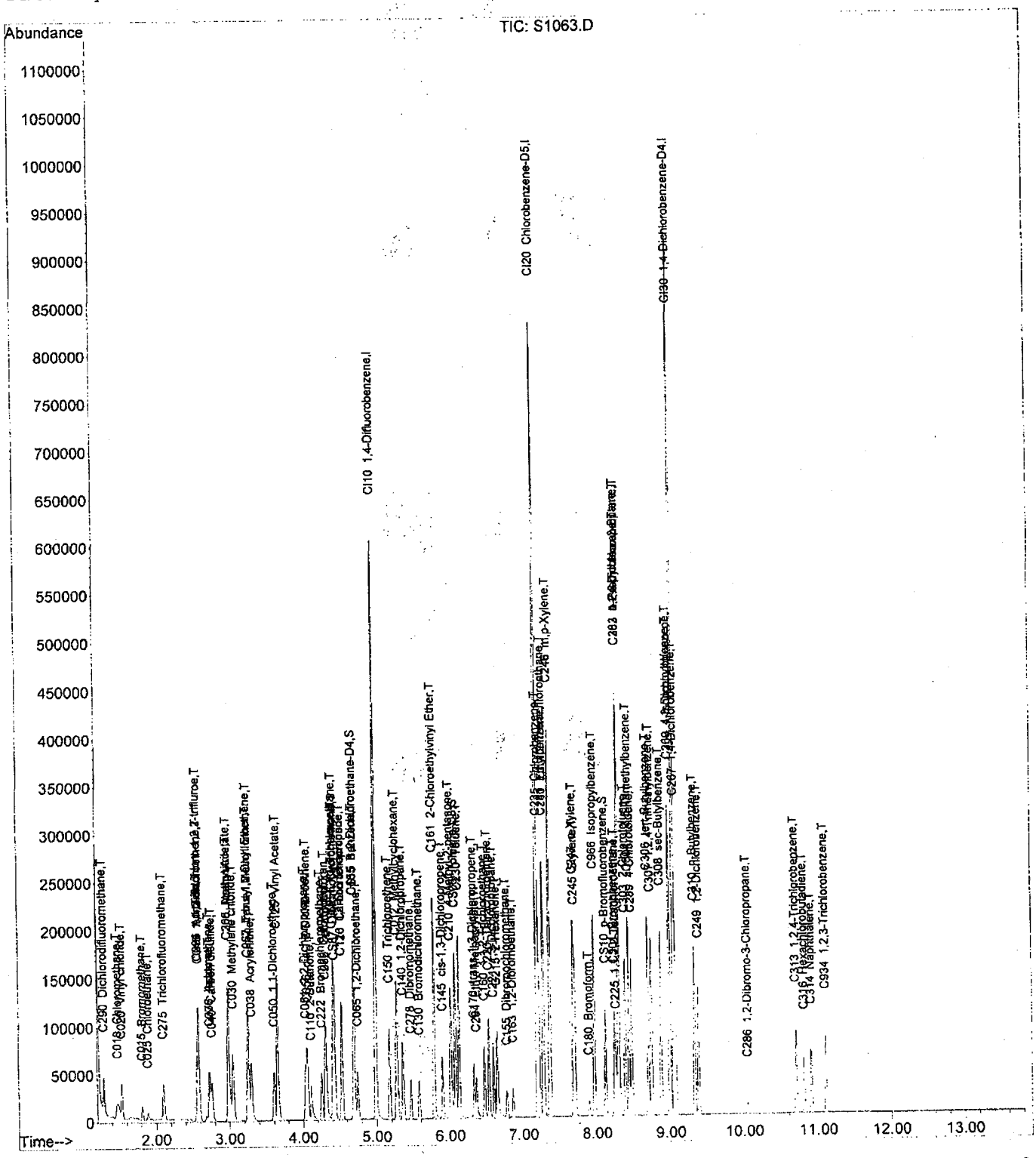
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1063.D
Acq On : 23 Nov 2009 15:39
Sample : RK91904-CAL2
Misc : VSTD 005
MS Integration Params: RTEINT.P

Vial: 4
Operator: RJ
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 23 17:47:02 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1064.D Vial: 5
Acq On : 23 Nov 2009 16:04 Operator: RJ
Sample : RK91904-CAL3 Inst : HP5973S
Misc : VSTD 010 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:47:41 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	397758	25.00	ug/L	0.00 98.20%
43) CI20	Chlorobenzene-D5	7.19	82	213618	25.00	ug/L	0.00 96.91%
63) CI30	1,4-Dichlorobenzene-	9.05	152	213602	25.00	ug/L	0.00 95.85%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	41808	10.34	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	41.36%#		
31) CS15	1,2-Dichloroethane-D	4.69	65	55066	9.53	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	38.12%#		
44) CS05	Toluene-D8	6.07	98	184961	11.48	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	45.92%#		
62) CS10	p-Bromofluorobenzene	8.12	174	53976	11.11	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	44.44%#		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	51920	13.96	ug/L #	100
3) C010	Chloromethane	1.48	50	63748	9.73	ug/L	100
4) C020	Vinyl chloride	1.53	62	59388	9.89	ug/L	89
5) C015	Bromomethane	1.81	94	14272	11.96	ug/L	89
6) C025	Chloroethane	1.89	64	8381	9.39	ug/L	89
7) C275	Trichlorofluorometha	2.10	101	54640	9.52	ug/L	99
8) C045	1,1-Dichloroethene	2.58	96	41365	10.55	ug/L	93
9) C030	Methylene chloride	3.04	84	50408	8.85	ug/L	92
10) C040	Carbon disulfide	2.76	76	92240	9.29	ug/L	100
11) C036	Acrolein	2.56	56	88653	263.72	ug/L	95
12) C038	Acrylonitrile	3.29	53	93277	46.24	ug/L	94
13) C035	Acetone	2.72	43	70964	41.99	ug/L	98
14) C300	Acetonitrile	2.98	41	303480	357.76	ug/L	100
15) C276	Iodomethane	2.73	142	54133	10.38	ug/L	99
16) C291	1,1,2-Trichloro-1,2,	2.56	101	43306	9.88	ug/L	96
17) C962	T-butyl Methyl Ether	3.25	73	106123	8.71	ug/L	95
18) C057	trans-1,2-Dichloroet	3.25	96	46476	10.09	ug/L	99
19) C255	Methyl Acetate	2.98	43	54041	11.46	ug/L	98
20) C050	1,1-Dichloroethane	3.60	63	86427	9.44	ug/L	100
21) C125	Vinyl Acetate	3.65	43	416955	41.27	ug/L	97
22) C051	2,2-Dichloropropane	4.04	77	52143	9.52	ug/L	95
23) C056	cis-1,2-Dichloroethe	4.06	96	51470	9.93	ug/L	98
24) C272	Tetrahydrofuran	4.30	42	71546	47.00	ug/L	89
25) C222	Bromochloromethane	4.26	128	22712	10.14	ug/L	98
27) C060	Chloroform	4.32	83	81445	9.25	ug/L	99
28) C115	1,1,1-Trichloroethan	4.41	97	65684	10.11	ug/L	96
29) C120	Carbon tetrachloride	4.52	117	53863	10.47	ug/L	99
30) C116	1,1-Dichloropropene	4.54	75	65995	10.00	ug/L	97
32) C165	Benzene	4.69	78	207420	9.91	ug/L	99
33) C065	1,2-Dichloroethane	4.74	62	65248	9.26	ug/L	97
34) C110	2-Butanone	4.11	43	110255	48.97	ug/L	91
35) C256	Cyclohexane	4.42	56	92030	9.22	ug/L	97
36) C150	Trichloroethene	5.17	95	49075	10.17	ug/L	92
37) C140	1,2-Dichloropropane	5.36	63	49595	10.17	ug/L	99
38) C278	Dibromomethane	5.47	93	26041	9.95	ug/L	91

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1064.D Vial: 5
Acq On : 23 Nov 2009 16:04 Operator: RJ
Sample : RK91904-CAL3 Inst : HP5973S
Misc : VSTD 010 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:47:41 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

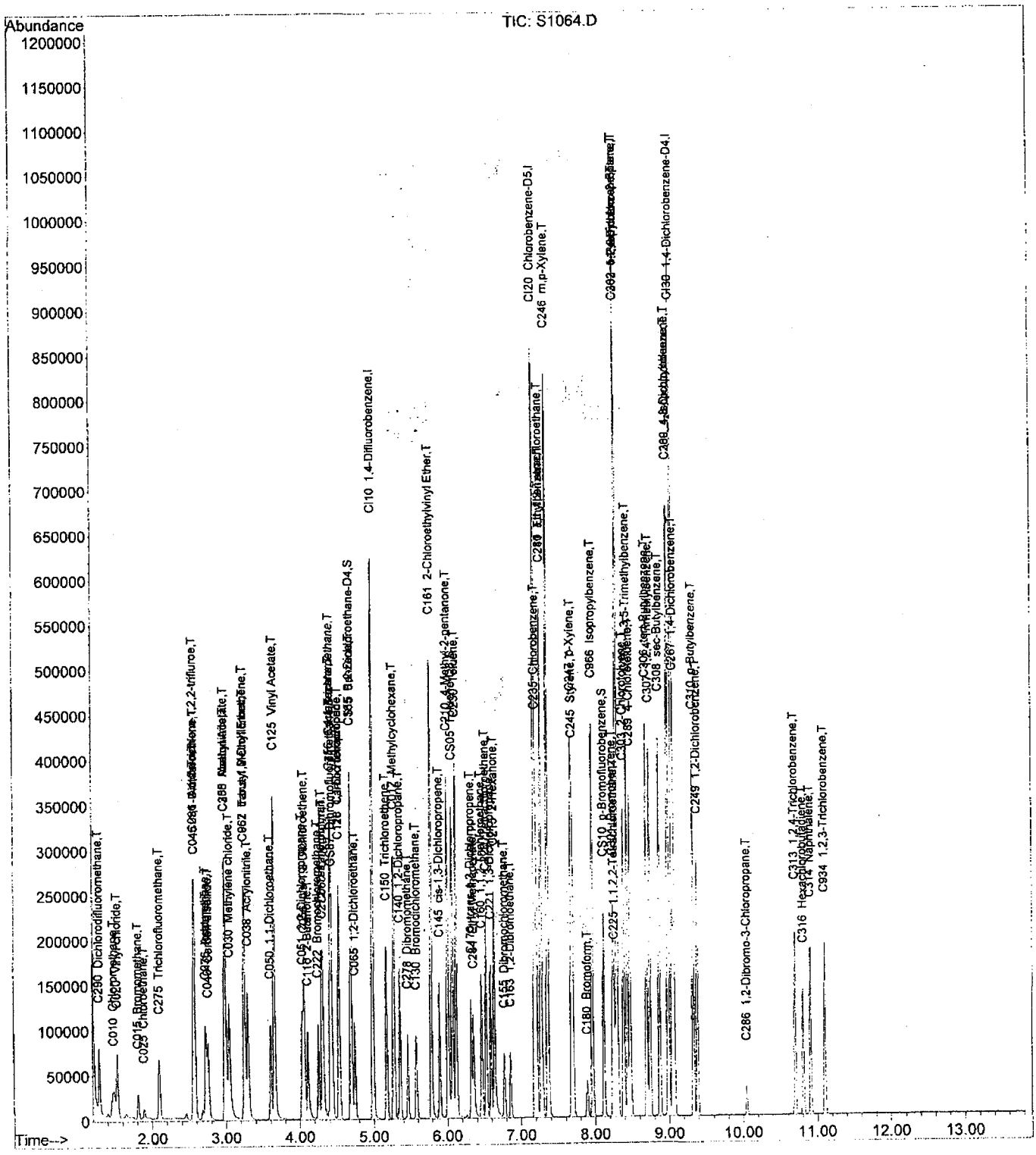
Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	47632	9.03	ug/L		97
40) C161	2-Chloroethylvinyl E	5.78	63	171718	65.11	ug/L		94
41) C012	Methylcyclohexane	5.28	83	97485	10.78	ug/L		98
42) C145	cis-1,3-Dichloroprop	5.90	75	64149	10.27	ug/L		98
45) C230	Toluene	6.12	92	132750	11.49	ug/L		95
46) C170	trans-1,3-Dichloropr	6.32	75	54348	10.95	ug/L		94
47) C284	Ethyl Methacrylate	6.35	69	51166	12.10	ug/L	#	94
48) C160	1,1,2-Trichloroethan	6.47	83	34898	11.13	ug/L		99
49) C210	4-Methyl-2-pentanone	6.01	43	214908	54.22	ug/L		93
50) C220	Tetrachloroethene	6.53	166	54475	11.90	ug/L		97
51) C221	1,3-Dichloropropane	6.59	76	76732	11.39	ug/L		98
52) C155	Dibromochloromethane	6.77	129	30353	10.13	ug/L		99
53) C163	1,2-Dibromoethane	6.86	107	40701	11.49	ug/L		99
54) C215	2-Hexanone	6.64	43	149362	62.59	ug/L		90
55) C235	Chlorobenzene	7.21	112	136575	11.37	ug/L		99
56) C281	1,1,1,2-Tetrachloroe	7.28	131	38946	10.41	ug/L		97
57) C240	Ethylbenzene	7.27	91	249714	11.66	ug/L		98
58) C246	m,p-Xylene	7.36	106	195045	23.48	ug/L		96
59) C247	o-Xylene	7.68	106	91396	11.47	ug/L		96
60) C245	Styrene	7.70	104	131807	11.63	ug/L		95
61) C180	Bromoform	7.89	173	16094	9.11	ug/L		94
64) C966	Isopropylbenzene	7.97	105	244328	9.91	ug/L		97
65) C301	Bromobenzene	8.24	156	55543	10.15	ug/L		90
66) C225	1,1,2,2-Tetrachloroe	8.26	83	50916	8.37	ug/L		99
67) C282	1,2,3-Trichloropropa	8.30	110	17671	9.14	ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	47634	42.90	ug/L	#	50
69) C302	n-Propylbenzene	8.30	91	311914	10.06	ug/L		93
70) C303	2-Chlorotoluene	8.39	126	55389	10.05	ug/L		100
71) C289	4-Chlorotoluene	8.47	126	57320	10.08	ug/L		100
72) C304	1,3,5-Trimethylbenze	8.43	105	202283	9.79	ug/L		97
73) C306	tert-Butylbenzene	8.70	134	45182	10.93	ug/L	#	90
74) C307	1,2,4-Trimethylbenze	8.74	105	198114	9.67	ug/L		98
75) C308	sec-Butylbenzene	8.87	105	243300	10.35	ug/L		96
76) C260	1,3-Dichlorobenzene	8.99	146	107986	9.92	ug/L		98
77) C309	4-Isopropyltoluene	8.99	119	217479	11.20	ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	109689	9.61	ug/L		98
79) C249	1,2-Dichlorobenzene	9.38	146	101966	9.68	ug/L		99
80) C310	n-Butylbenzene	9.33	91	182603	10.60	ug/L		95
81) C286	1,2-Dibromo-3-Chloro	10.05	75	6368	7.07	ug/L		88
82) C313	1,2,4-Trichlorobenze	10.70	180	54951	10.11	ug/L		100
83) C316	Hexachlorobutadiene	10.81	225	22706	9.17	ug/L		92
84) C314	Naphthalene	10.90	128	123332	8.45	ug/L		99
85) C934	1,2,3-Trichlorobenze	11.10	180	51187	10.20	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1064.D Vial: 5
Acq On : 23 Nov 2009 16:04 Operator: RJ
Sample : RK91904-CAL3 Inst : HP5973S
Misc : VSTD 010 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 23 17:47:41 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1065.D Vial: 6
Acq On : 23 Nov 2009 16:28 Operator: RJ
Sample : RK91904-CAL4 Inst : HP5973S
Misc : VSTD 025 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:45:38 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:35 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	405062	25.00	ug/L	0.00 100.00%
43) CI20	Chlorobenzene-D5	7.19	82	220420	25.00	ug/L	0.00 100.00%
63) CI30	1,4-Dichlorobenzene-	9.05	152	222856	25.00	ug/L	0.00 100.00%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	109604	26.62	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	106.48%	
31) CS15	1,2-Dichloroethane-D	4.69	65	135960	23.11	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	92.44%	
44) CS05	Toluene-D8	6.07	98	468313	28.17	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	112.68%	
62) CS10	p-Bromofluorobenzene	8.12	174	152550	30.42	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	121.68%#	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	132351	34.95	ug/L #	100
3) C010	Chloromethane	1.48	50	165246	24.76	ug/L	97
4) C020	Vinyl chloride	1.53	62	153809	25.16	ug/L	88
5) C015	Bromomethane	1.80	94	36700	30.20	ug/L	87
6) C025	Chloroethane	1.89	64	21455	23.60	ug/L	90
7) C275	Trichlorofluorometha	2.09	101	146902	25.13	ug/L	99
8) C045	1,1-Dichloroethene	2.58	96	106082	26.57	ug/L	94
9) C030	Methylene chloride	3.05	84	123388	21.28	ug/L	90
10) C040	Carbon disulfide	2.76	76	256652	25.38	ug/L	100
11) C036	Acrolein	2.56	56	225085	657.50	ug/L	96
12) C038	Acrylonitrile	3.29	53	231923	112.89	ug/L	93
13) C035	Acetone	2.72	43	176371	102.48	ug/L	96
14) C300	Acetonitrile	2.98	41	739635	856.19	ug/L	99
15) C276	Iodomethane	2.72	142	153715	28.94	ug/L	100
16) C291	1,1,2-Trichloro-1,2,	2.56	101	109684	24.56	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	277916	22.40	ug/L	95
18) C057	trans-1,2-Dichloroet	3.25	96	118807	25.32	ug/L	99
19) C255	Methyl Acetate	2.97	43	136319	28.40	ug/L	97
20) C050	1,1-Dichloroethane	3.60	63	220854	23.68	ug/L	100
21) C125	Vinyl Acetate	3.65	43	1120650	108.92	ug/L	96
22) C051	2,2-Dichloropropane	4.03	77	142423	25.53	ug/L	96
23) C056	cis-1,2-Dichloroethe	4.06	96	131142	24.85	ug/L	97
24) C272	Tetrahydrofuran	4.29	42	180627	116.52	ug/L	91
25) C222	Bromochloromethane	4.25	128	59767	26.20	ug/L	95
27) C060	Chloroform	4.32	83	206944	23.07	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	177268	26.79	ug/L	98
29) C120	Carbon tetrachloride	4.52	117	146297	27.91	ug/L	98
30) C116	1,1-Dichloropropene	4.53	75	170912	25.44	ug/L	99
32) C165	Benzene	4.69	78	525595	24.65	ug/L	100
33) C065	1,2-Dichloroethane	4.74	62	166103	23.15	ug/L	99
34) C110	2-Butanone	4.10	43	275000	119.95	ug/L	93
35) C256	Cyclohexane	4.42	56	235445	23.17	ug/L	98
36) C150	Trichloroethene	5.17	95	126602	25.77	ug/L	94
37) C140	1,2-Dichloropropane	5.36	63	128253	25.83	ug/L	100
38) C278	Dibromomethane	5.47	93	68187	25.59	ug/L	92

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1065.D Vial: 6
Acq On : 23 Nov 2009 16:28 Operator: RJ
Sample : RK91904-CAL4 Inst : HP5973S
Misc : VSTD 025 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:45:38 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:35 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	134468	25.04	ug/L		99
40) C161	2-Chloroethylvinyl E	5.78	63	435293	162.07	ug/L		94
41) C012	Methylcyclohexane	5.27	83	248950	27.02	ug/L		99
42) C145	cis-1,3-Dichloroprop	5.90	75	175722	27.62	ug/L		99
45) C230	Toluene	6.12	92	336356	28.21	ug/L		94
46) C170	trans-1,3-Dichloropr	6.32	75	155340	30.34	ug/L		95
47) C284	Ethyl Methacrylate	6.35	69	144328	33.08	ug/L	#	93
48) C160	1,1,2-Trichloroethan	6.47	83	87871	27.16	ug/L		98
49) C210	4-Methyl-2-pentanone	6.00	43	552541	135.11	ug/L		95
50) C220	Tetrachloroethene	6.53	166	137207	29.04	ug/L		98
51) C221	1,3-Dichloropropane	6.59	76	196503	28.26	ug/L		99
52) C155	Dibromochloromethane	6.77	129	90222	29.19	ug/L		100
53) C163	1,2-Dibromoethane	6.85	107	107479	29.40	ug/L		96
54) C215	2-Hexanone	6.63	43	383243	155.64	ug/L		92
55) C235	Chlorobenzene	7.21	112	345402	27.86	ug/L		98
56) C281	1,1,1,2-Tetrachloroe	7.28	131	106234	27.52	ug/L		98
57) C240	Ethylbenzene	7.27	91	633452	28.67	ug/L		99
58) C246	m,p-Xylene	7.36	106	496306	57.91	ug/L		96
59) C247	o-Xylene	7.68	106	235987	28.69	ug/L		96
60) C245	Styrene	7.71	104	345431	29.53	ug/L		93
61) C180	Bromoform	7.89	173	50738	27.83	ug/L		95
64) C966	Isopropylbenzene	7.97	105	630088	24.50	ug/L		98
65) C301	Bromobenzene	8.24	156	141233	24.73	ug/L		92
66) C225	1,1,2,2-Tetrachloroe	8.26	83	132061	20.82	ug/L		100
67) C282	1,2,3-Trichloropropa	8.30	110	43907	21.76	ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	123743	106.82	ug/L	#	57
69) C302	n-Propylbenzene	8.30	91	805223	24.89	ug/L		93
70) C303	2-Chlorotoluene	8.39	126	144770	25.19	ug/L		100
71) C289	4-Chlorotoluene	8.47	126	147356	24.83	ug/L		100
72) C304	1,3,5-Trimethylbenze	8.44	105	526081	24.40	ug/L		98
73) C306	tert-Butylbenzene	8.70	134	118623	27.50	ug/L	#	91
74) C307	1,2,4-Trimethylbenze	8.74	105	509796	23.86	ug/L		96
75) C308	sec-Butylbenzene	8.87	105	638324	26.02	ug/L		95
76) C260	1,3-Dichlorobenzene	8.99	146	271199	23.88	ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	565420	27.91	ug/L		99
78) C267	1,4-Dichlorobenzene	9.07	146	277634	23.31	ug/L		99
79) C249	1,2-Dichlorobenzene	9.38	146	262204	23.85	ug/L		98
80) C310	n-Butylbenzene	9.33	91	477718	26.58	ug/L		97
81) C286	1,2-Dibromo-3-Chloro	10.05	75	20007	21.30	ug/L		94
82) C313	1,2,4-Trichlorobenze	10.70	180	141905	25.02	ug/L		97
83) C316	Hexachlorobutadiene	10.81	225	58473	22.63	ug/L		96
84) C314	Naphthalene	10.90	128	322460	21.17	ug/L		98
85) C934	1,2,3-Trichlorobenze	11.10	180	130861	25.00	ug/L		100

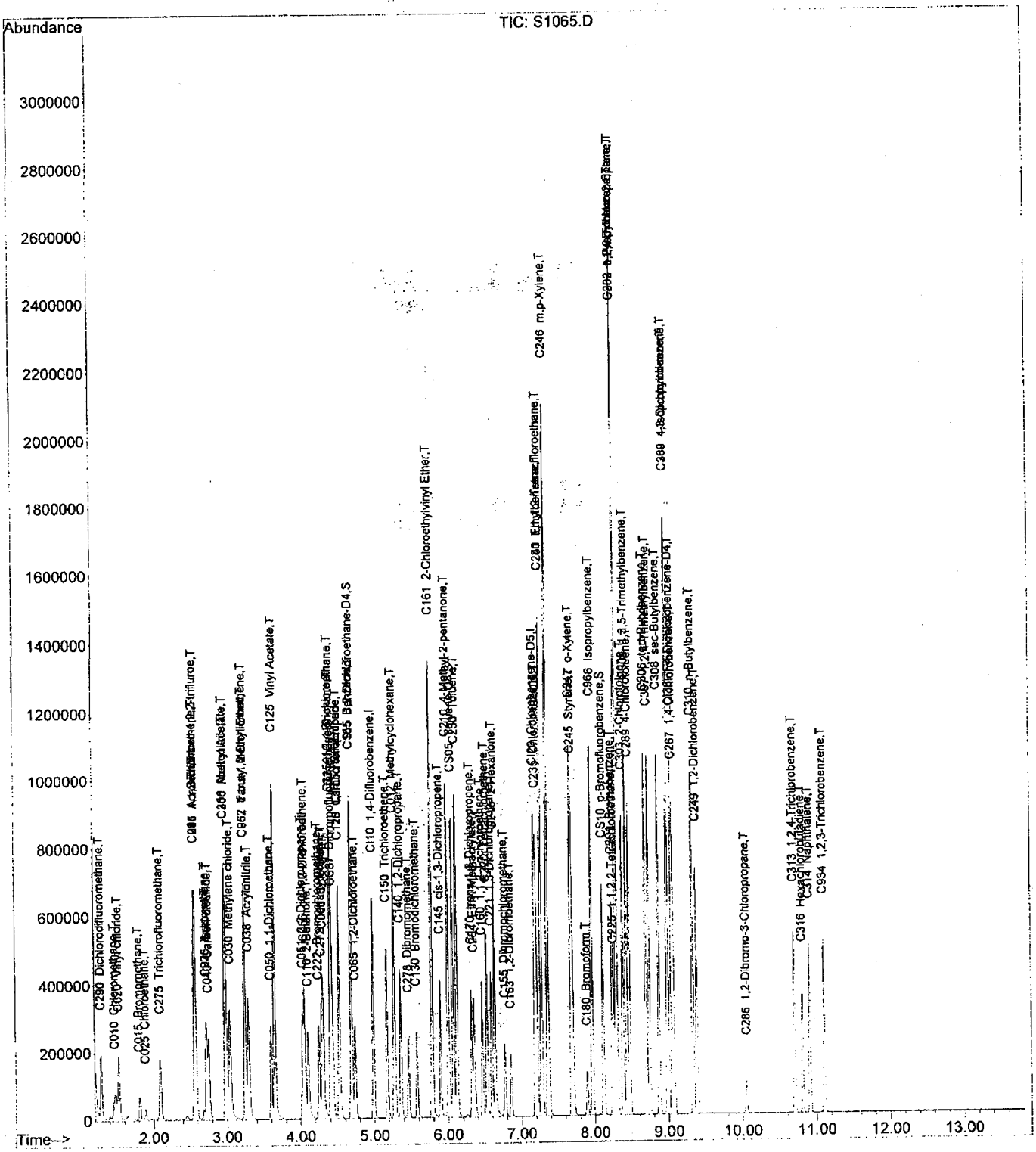
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1065.D
Acq On : 23 Nov 2009 16:28
Sample : RK91904-CAL4
Misc : VSTD 025
MS Integration Params: RTEINT.P

Vial: 6
Operator: RJ
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 23 17:45:38 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:35 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1066.D Vial: 7
Acq On : 23 Nov 2009 16:52 Operator: RJ
Sample : RK91904-CAL5 Inst : HP5973S
Misc : VSTD 050 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:48:39 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	398821	25.00	ug/L	0.00 98.46%
43) CI20	Chlorobenzene-D5	7.19	82	216616	25.00	ug/L	0.00 98.27%
63) CI30	1,4-Dichlorobenzene-	9.05	152	217784	25.00	ug/L	0.00 97.72%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	224908	55.48	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	221.92%#		
31) CS15	1,2-Dichloroethane-D	4.69	65	277572	47.92	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	191.68%#		
44) CS05	Toluene-D8	6.07	98	957719	58.62	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	234.48%#		
62) CS10	p-Bromofluorobenzene	8.12	174	293126	59.48	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	237.92%#		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	257375	69.02	ug/L #	100
3) C010	Chloromethane	1.48	50	323308	49.19	ug/L	98
4) C020	Vinyl chloride	1.53	62	305809	50.81	ug/L	86
5) C015	Bromomethane	1.80	94	75596	63.17	ug/L	87
6) C025	Chloroethane	1.89	64	42274	47.24	ug/L	90
7) C275	Trichlorofluorometha	2.10	101	297891	51.76	ug/L	99
8) C045	1,1-Dichloroethene	2.58	96	208831	53.13	ug/L	96
9) C030	Methylene chloride	3.05	84	240929	42.21	ug/L	90
10) C040	Carbon disulfide	2.76	76	535345	53.76	ug/L	100
11) C036	Acrolein	2.56	56	434245	1288.34	ug/L	95
12) C038	Acrylonitrile	3.29	53	436625	215.85	ug/L	93
13) C035	Acetone	2.72	43	329621	194.52	ug/L	97
14) C300	Acetonitrile	2.98	41	1368149	1608.54	ug/L	99
15) C276	Iodomethane	2.73	142	308197	58.92	ug/L	99
16) C291	1,1,2-Trichloro-1,2,	2.56	101	212827	48.41	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	550142	45.03	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	235578	50.99	ug/L	99
19) C255	Methyl Acetate	2.97	43	253327	53.60	ug/L	94
20) C050	1,1-Dichloroethane	3.60	63	441086	48.04	ug/L	98
21) C125	Vinyl Acetate	3.65	43	2240695	221.19	ug/L	96
22) C051	2,2-Dichloropropane	4.03	77	296214	53.93	ug/L	95
23) C056	cis-1,2-Dichloroethe	4.06	96	257680	49.60	ug/L	97
24) C272	Tetrahydrofuran	4.29	42	336359	220.38	ug/L	88
25) C222	Bromochloromethane	4.25	128	114825	51.13	ug/L	94
27) C060	Chloroform	4.32	83	409985	46.42	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	357874	54.92	ug/L	97
29) C120	Carbon tetrachloride	4.52	117	304362	58.98	ug/L	98
30) C116	1,1-Dichloropropene	4.53	75	336065	50.80	ug/L	97
32) C165	Benzene	4.69	78	1032198	49.16	ug/L	99
33) C065	1,2-Dichloroethane	4.74	62	323265	45.76	ug/L	98
34) C110	2-Butanone	4.10	43	508547	225.29	ug/L	94
35) C256	Cyclohexane	4.42	56	463634	46.34	ug/L	98
36) C150	Trichloroethene	5.17	95	250678	51.83	ug/L	93
37) C140	1,2-Dichloropropane	5.36	63	253528	51.87	ug/L	100
38) C278	Dibromomethane	5.47	93	134225	51.16	ug/L	93

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1066.D Vial: 7
Acq On : 23 Nov 2009 16:52 Operator: RJ
Sample : RK91904-CAL5 Inst : HP5973S
Misc : VSTD 050 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:48:39 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	279335	52.83	ug/L		99
40) C161	2-Chloroethylvinyl E	5.78	63	842886	318.73	ug/L		94
41) C012	Methylcyclohexane	5.27	83	486246	53.60	ug/L		99
42) C145	cis-1,3-Dichloroprop	5.90	75	363002	57.94	ug/L		100
45) C230	Toluene	6.12	92	655369	55.93	ug/L		95
46) C170	trans-1,3-Dichloropr	6.32	75	324700	64.53	ug/L		95
47) C284	Ethyl Methacrylate	6.35	69	293571	68.46	ug/L	#	91
48) C160	1,1,2-Trichloroethan	6.47	83	169532	53.33	ug/L		100
49) C210	4-Methyl-2-pentanone	6.00	43	1036088	257.80	ug/L		93
50) C220	Tetrachloroethene	6.53	166	268997	57.94	ug/L		97
51) C221	1,3-Dichloropropane	6.59	76	380617	55.70	ug/L		99
52) C155	Dibromochloromethane	6.77	129	194917	64.18	ug/L		98
53) C163	1,2-Dibromoethane	6.85	107	207834	57.84	ug/L		98
54) C215	2-Hexanone	6.63	43	712206	294.32	ug/L		91
55) C235	Chlorobenzene	7.21	112	678822	55.72	ug/L		99
56) C281	1,1,1,2-Tetrachloroe	7.28	131	218498	57.60	ug/L		97
57) C240	Ethylbenzene	7.27	91	1247317	57.44	ug/L		99
58) C246	m,p-Xylene	7.36	106	965163	114.60	ug/L		96
59) C247	o-Xylene	7.68	106	460134	56.93	ug/L		95
60) C245	Styrene	7.71	104	674781	58.70	ug/L		95
61) C180	Bromoform	7.89	173	116055	64.78	ug/L		100
64) C966	Isopropylbenzene	7.97	105	1235353	49.15	ug/L		97
65) C301	Bromobenzene	8.24	156	277905	49.80	ug/L		92
66) C225	1,1,2,2-Tetrachloroe	8.26	83	252426	40.71	ug/L		99
67) C282	1,2,3-Trichloropropa	8.30	110	82320	41.74	ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	231645	204.62	ug/L	#	63
69) C302	n-Propylbenzene	8.30	91	1556354	49.23	ug/L		94
70) C303	2-Chlorotoluene	8.39	126	278577	49.59	ug/L		100
71) C289	4-Chlorotoluene	8.47	126	289478	49.92	ug/L		100
72) C304	1,3,5-Trimethylbenze	8.44	105	1020343	48.42	ug/L		98
73) C306	tert-Butylbenzene	8.70	134	231044	54.82	ug/L	#	91
74) C307	1,2,4-Trimethylbenze	8.74	105	993050	47.56	ug/L		97
75) C308	sec-Butylbenzene	8.87	105	1235122	51.51	ug/L		96
76) C260	1,3-Dichlorobenzene	8.99	146	526441	47.44	ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	1092456	55.18	ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	536164	46.07	ug/L		99
79) C249	1,2-Dichlorobenzene	9.38	146	509484	47.43	ug/L		98
80) C310	n-Butylbenzene	9.33	91	934898	53.24	ug/L		96
81) C286	1,2-Dibromo-3-Chloro	10.05	75	42006	45.76	ug/L		92
82) C313	1,2,4-Trichlorobenze	10.70	180	285680	51.54	ug/L		97
83) C316	Hexachlorobutadiene	10.81	225	114879	45.49	ug/L		97
84) C314	Naphthalene	10.91	128	624529	41.95	ug/L		99
85) C934	1,2,3-Trichlorobenze	11.10	180	256039	50.05	ug/L		98

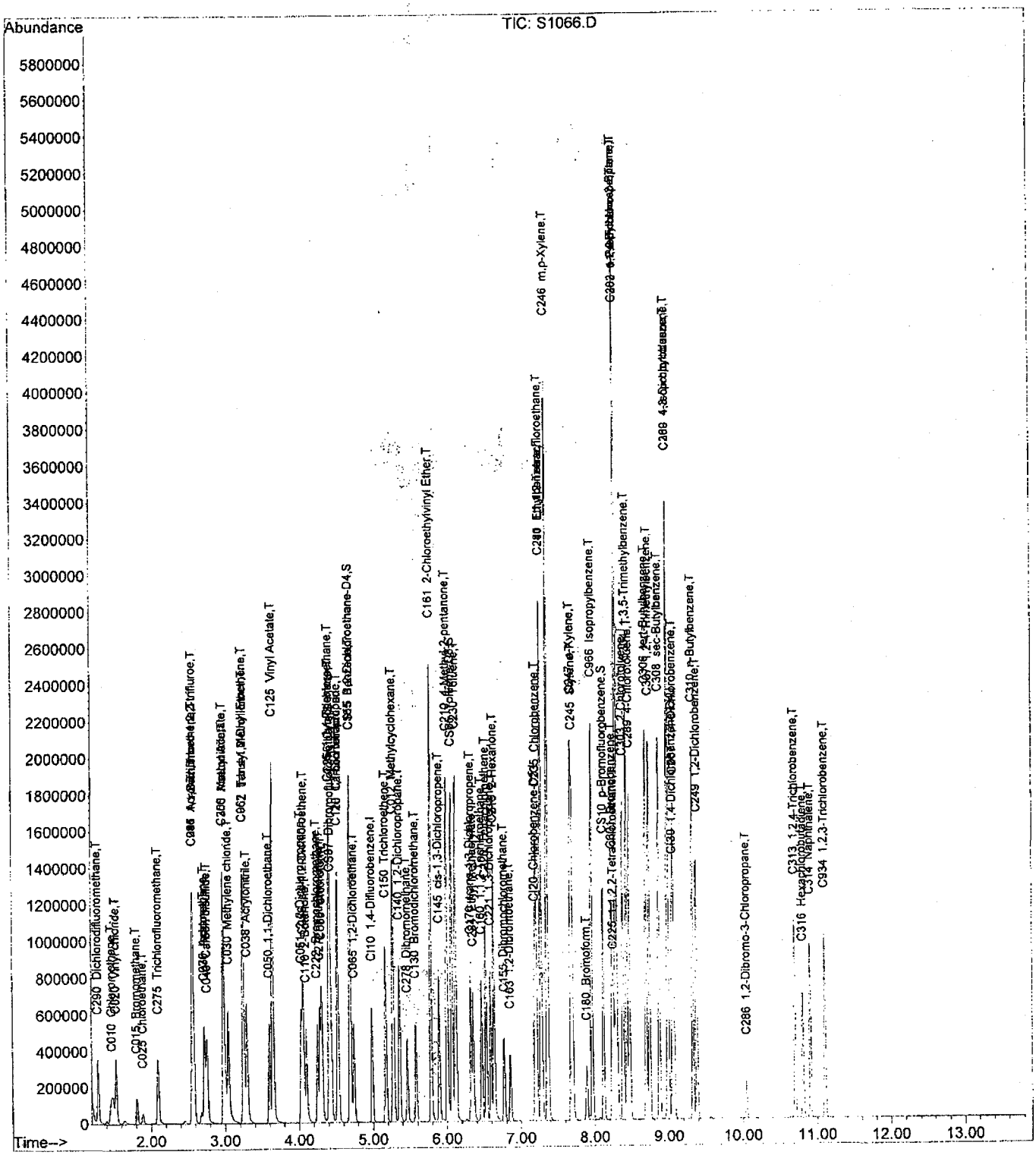
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1066.D
Acq On : 23 Nov 2009 16:52
Sample : RK91904-CAL5
Misc : VSTD 050
MS Integration Params: RTEINT.P

Vial: 7
Operator: RJ
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 23 17:48:39 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1067.D Vial: 8
Acq On : 23 Nov 2009 17:17 Operator: RJ
Sample : RK91904-CAL6 Inst : HP5973S
Misc : VSTD 100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:49:10 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	410371	25.00	ug/L	0.00 101.31%
43) CI20	Chlorobenzene-D5	7.19	82	225885	25.00	ug/L	0.00 102.48%
63) CI30	1,4-Dichlorobenzene-	9.06	152	229148	25.00	ug/L	0.00 102.82%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	475814	114.08	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	456.32%#		
31) CS15	1,2-Dichloroethane-D	4.69	65	581853	97.63	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	390.52%#		
44) CS05	Toluene-D8	6.07	98	2007192	117.82	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	471.28%#		
62) CS10	p-Bromofluorobenzene	8.12	174	608018	118.31	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	473.24%#		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	506836	132.10	ug/L #	100
3) C010	Chloromethane	1.48	50	637286	94.24	ug/L	99
4) C020	Vinyl chloride	1.53	62	604900	97.67	ug/L	87
5) C015	Bromomethane	1.81	94	147623	119.89	ug/L	89
6) C025	Chloroethane	1.89	64	82928	90.05	ug/L	89
7) C275	Trichlorofluorometha	2.10	101	564158	95.26	ug/L	100
8) C045	1,1-Dichloroethene	2.58	96	411597	101.77	ug/L	98
9) C030	Methylene chloride	3.04	84	475698	80.99	ug/L	91
10) C040	Carbon disulfide	2.76	76	1099827	107.34	ug/L	99
11) C036	Acrolein	2.56	56	922099	2658.72	ug/L	95
12) C038	Acrylonitrile	3.29	53	923023	443.47	ug/L	93
13) C035	Acetone	2.72	43	708105	406.12	ug/L	96
14) C300	Acetonitrile	2.98	41	2837333	3241.98	ug/L	98
15) C276	Iodomethane	2.73	142	631681	117.37	ug/L	100
16) C291	1,1,2-Trichloro-1,2,	2.56	101	415885	91.94	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	1181036	93.95	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	469294	98.71	ug/L	99
19) C255	Methyl Acetate	2.97	43	546257	112.32	ug/L	94
20) C050	1,1-Dichloroethane	3.60	63	876202	92.74	ug/L	99
21) C125	Vinyl Acetate	3.65	43	4642233	445.36	ug/L	95
22) C051	2,2-Dichloropropane	4.04	77	611475	108.18	ug/L	96
23) C056	cis-1,2-Dichloroethe	4.06	96	514001	96.15	ug/L	97
24) C272	Tetrahydrofuran	4.28	42	738001	469.92	ug/L	89
25) C222	Bromochloromethane	4.26	128	229716	99.42	ug/L	96
27) C060	Chloroform	4.32	83	809490	89.08	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	721597	107.63	ug/L	99
29) C120	Carbon tetrachloride	4.52	117	619425	116.66	ug/L	99
30) C116	1,1-Dichloropropene	4.54	75	667478	98.05	ug/L	98
32) C165	Benzene	4.69	78	2014388	93.24	ug/L	99
33) C065	1,2-Dichloroethane	4.74	62	640906	88.17	ug/L	97
34) C110	2-Butanone	4.10	43	1118774	481.67	ug/L	91
35) C256	Cyclohexane	4.42	56	912351	88.62	ug/L	98
36) C150	Trichloroethene	5.17	95	493565	99.17	ug/L	94
37) C140	1,2-Dichloropropane	5.36	63	507426	100.89	ug/L	99
38) C278	Dibromomethane	5.47	93	273905	101.46	ug/L	93

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1067.D Vial: 8
Acq On : 23 Nov 2009 17:17 Operator: RJ
Sample : RK91904-CAL6 Inst : HP5973S
Misc : VSTD 100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 17:49:10 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1065.D (23 Nov 2009 16:28)

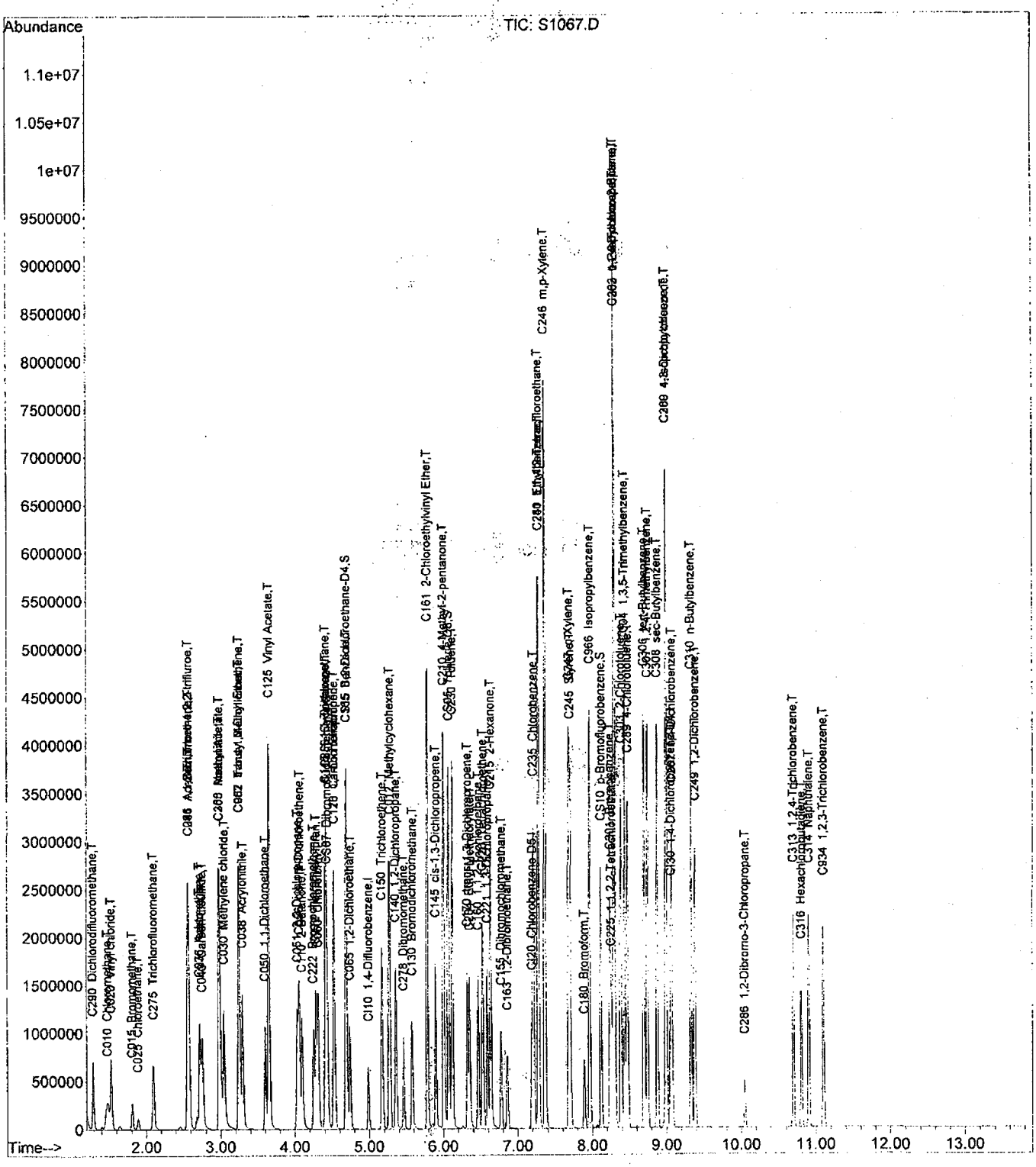
Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	583125	107.19 ug/L		98
40) C161	2-Chloroethylvinyl E	5.79	63	1729319	635.52 ug/L		93
41) C012	Methylcyclohexane	5.28	83	963069	103.18 ug/L		98
42) C145	cis-1,3-Dichloroprop	5.90	75	749266	116.23 ug/L		100
45) C230	Toluene	6.12	92	1292902	105.81 ug/L		95
46) C170	trans-1,3-Dichloropr	6.32	75	683234	130.21 ug/L		96
47) C284	Ethyl Methacrylate	6.35	69	636707	142.38 ug/L	#	91
48) C160	1,1,2-Trichloroethan	6.47	83	344252	103.85 ug/L		100
49) C210	4-Methyl-2-pentanone	6.00	43	2227912	531.60 ug/L		92
50) C220	Tetrachloroethene	6.53	166	532332	109.95 ug/L		98
51) C221	1,3-Dichloropropane	6.59	76	766315	107.55 ug/L		98
52) C155	Dibromochloromethane	6.77	129	422507	133.41 ug/L		100
53) C163	1,2-Dibromoethane	6.86	107	430139	114.80 ug/L		98
54) C215	2-Hexanone	6.63	43	1566780	620.91 ug/L		90
55) C235	Chlorobenzene	7.21	112	1356713	106.80 ug/L		98
56) C281	1,1,1,2-Tetrachloroe	7.28	131	444004	112.25 ug/L		96
57) C240	Ethylbenzene	7.27	91	2477874	109.42 ug/L		99
58) C246	m,p-Xylene	7.36	106	1881954	214.28 ug/L		95
59) C247	o-Xylene	7.69	106	913389	108.38 ug/L		98
60) C245	Styrene	7.70	104	1349150	112.54 ug/L		96
61) C180	Bromoform	7.89	173	272312	145.76 ug/L		98
64) C966	Isopropylbenzene	7.97	105	2461076	93.06 ug/L		98
65) C301	Bromobenzene	8.24	156	558081	95.04 ug/L		89
66) C225	1,1,2,2-Tetrachloroe	8.26	83	541230	82.97 ug/L		99
67) C282	1,2,3-Trichloropropa	8.30	110	167876	80.90 ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	453377	380.62 ug/L	#	74
69) C302	n-Propylbenzene	8.30	91	3040057	91.40 ug/L		94
70) C303	2-Chlorotoluene	8.39	126	558972	94.57 ug/L		100
71) C289	4-Chlorotoluene	8.48	126	572072	93.77 ug/L		100
72) C304	1,3,5-Trimethylbenze	8.43	105	2078046	93.72 ug/L		97
73) C306	tert-Butylbenzene	8.70	134	464485	104.74 ug/L	#	89
74) C307	1,2,4-Trimethylbenze	8.75	105	2016845	91.79 ug/L		98
75) C308	sec-Butylbenzene	8.87	105	2517305	99.78 ug/L		95
76) C260	1,3-Dichlorobenzene	9.00	146	1030603	88.26 ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	2210335	106.10 ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	1076308	87.90 ug/L		98
79) C249	1,2-Dichlorobenzene	9.38	146	1009969	89.35 ug/L		97
80) C310	n-Butylbenzene	9.33	91	1941472	105.07 ug/L		96
81) C286	1,2-Dibromo-3-Chloro	10.05	75	100677	104.23 ug/L		95
82) C313	1,2,4-Trichlorobenze	10.70	180	602800	103.37 ug/L		99
83) C316	Hexachlorobutadiene	10.81	225	239817	90.25 ug/L		97
84) C314	Naphthalene	10.90	128	1504222	96.03 ug/L		99
85) C934	1,2,3-Trichlorobenze	11.10	180	550261	102.22 ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1067.D Vial: 8
Acq On : 23 Nov 2009 17:17 Operator: RJ
Sample : RK91904-CAL6 Inst : HP5973S
Misc : VSTD 100 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 23 17:49:10 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 17:45:48 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1070.D Vial: 11
Acq On : 23 Nov 2009 18:30 Operator: RJ
Sample : RK91904-SCV1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 22:49:56 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 22:49:21 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\S\DATA\112309\S1065.D (23 Nov 2009 16:28)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	407810	25.00	ug/L	0.00 100.68%
43) CI20	Chlorobenzene-D5	7.19	82	224219	25.00	ug/L	0.00 101.72%
63) CI30	1,4-Dichlorobenzene-	9.05	152	224998	25.00	ug/L	0.00 100.96%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	109432	24.81	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	99.24%		
31) CS15	1,2-Dichloroethane-D	4.69	65	138560	23.93	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	95.72%		
44) CS05	Toluene-D8	6.07	98	475289	23.96	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	95.84%		
62) CS10	p-Bromofluorobenzene	8.12	174	152812	25.45	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	101.80%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	89108	16.59	ug/L #	100
3) C010	Chloromethane	1.48	50	136014	20.19	ug/L	98
4) C020	Vinyl chloride	1.53	62	134083	21.03	ug/L	88
5) C015	Bromomethane	1.81	94	35634	23.21	ug/L	85
6) C025	Chloroethane	1.89	64	21399	23.95	ug/L	92
7) C275	Trichlorofluorometha	2.09	101	132279	22.00	ug/L	100
8) C045	1,1-Dichloroethene	2.58	96	105731	24.59	ug/L	97
9) C030	Methylene chloride	3.05	84	122987	23.64	ug/L	91
10) C040	Carbon disulfide	2.76	76	247081	24.60	ug/L	99
11) C036	Acrolein	2.56	56	35309	79.89	ug/L	96
12) C038	Acrylonitrile	3.29	53	242898	132.88	ug/L	93
13) C035	Acetone	2.72	43	179130	127.41	ug/L	98
14) C300	Acetonitrile	2.98	41	726458	980.03	ug/L	99
15) C276	Iodomethane	2.72	142	100830	16.37	ug/L	100
16) C291	1,1,2-Trichloro-1,2,	2.56	101	97806	22.02	ug/L	96
17) C962	T-butyl Methyl Ether	3.25	73	281531	25.40	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	119507	24.49	ug/L	99
19) C255	Methyl Acetate	2.97	43	155744	29.25	ug/L	96
20) C050	1,1-Dichloroethane	3.60	63	220593	24.49	ug/L	99
21) C125	Vinyl Acetate	3.65	43	907889	109.07	ug/L	97
22) C051	2,2-Dichloropropane	4.04	77	135141	24.11	ug/L	95
23) C056	cis-1,2-Dichloroethe	4.06	96	132578	24.63	ug/L	99
24) C272	Tetrahydrofuran	4.29	42	176874	123.29	ug/L	91
25) C222	Bromochloromethane	4.25	128	58965	25.13	ug/L	93
27) C060	Chloroform	4.32	83	208278	24.67	ug/L	99
28) C115	1,1,1-Trichloroethan	4.41	97	178390	25.56	ug/L	98
29) C120	Carbon tetrachloride	4.52	117	151414	26.60	ug/L	98
30) C116	1,1-Dichloropropene	4.53	75	173171	25.31	ug/L	98
32) C165	Benzene	4.69	78	526179	24.44	ug/L	99
33) C065	1,2-Dichloroethane	4.74	62	164966	24.62	ug/L	98
34) C110	2-Butanone	4.10	43	277143	130.96	ug/L	92
35) C256	Cyclohexane	4.42	56	224567	23.59	ug/L	99
36) C150	Trichloroethene	5.17	95	127970	24.86	ug/L	97
37) C140	1,2-Dichloropropane	5.36	63	128747	24.95	ug/L	99
38) C278	Dibromomethane	5.47	93	68865	25.81	ug/L	94

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1070.D Vial: 11
Acq On : 23 Nov 2009 18:30 Operator: RJ
Sample : RK91904-SCV1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 23 22:49:56 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 22:49:21 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDCHEM\S\DATA\112309\S1065.D (23 Nov 2009 16:28)

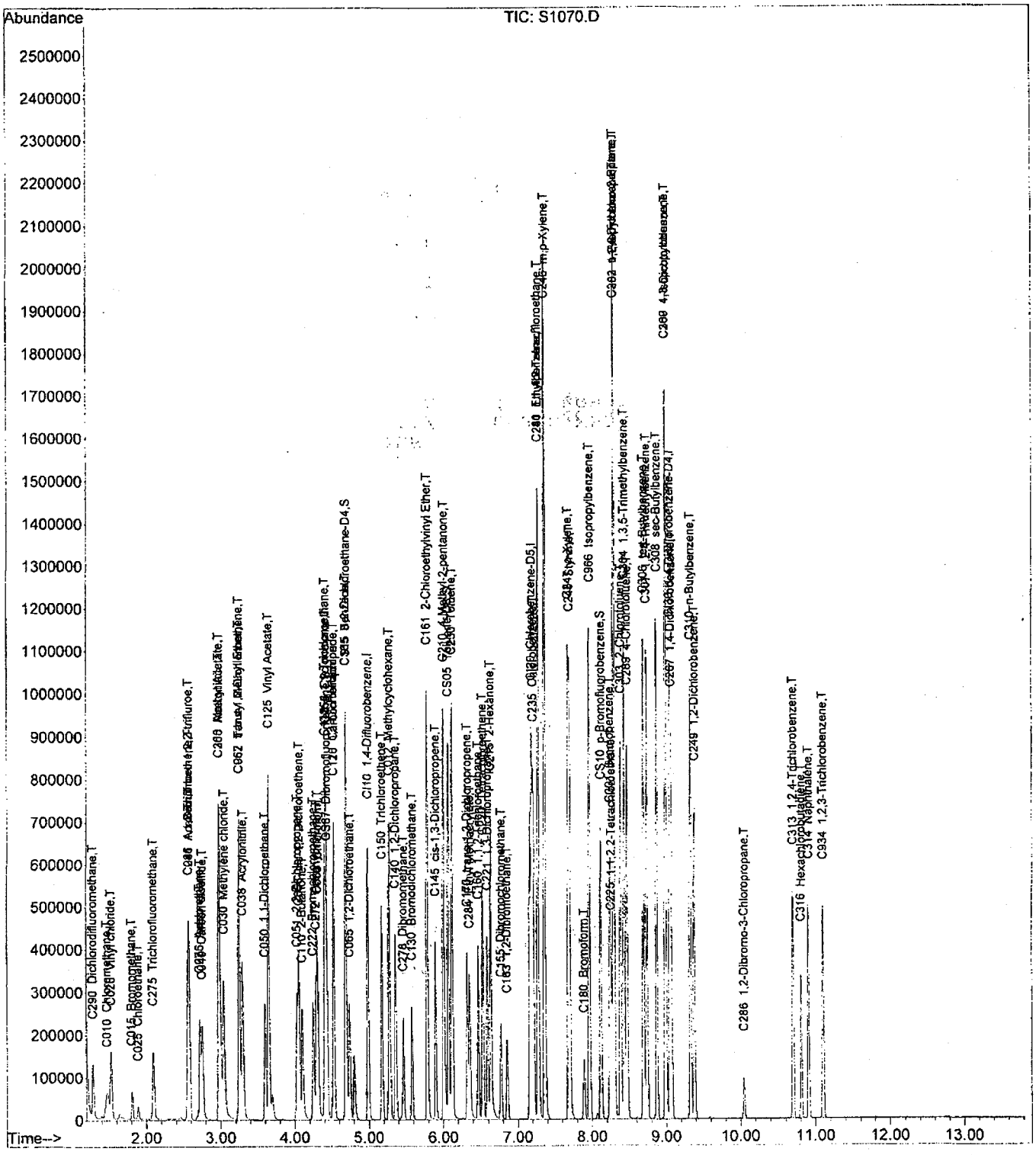
Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	137972	26.95 ug/L		96
40) C161	2-Chloroethylvinyl E	5.78	63	336317	99.38 ug/L		94
41) C012	Methylcyclohexane	5.27	83	230536	23.17 ug/L		98
42) C145	cis-1,3-Dichloroprop	5.90	75	179477	26.79 ug/L		98
45) C230	Toluene	6.12	92	339635	24.44 ug/L		95
46) C170	trans-1,3-Dichloropr	6.32	75	160760	27.20 ug/L		94
47) C284	Ethyl Methacrylate	6.35	69	140997	23.58 ug/L	#	92
48) C160	1,1,2-Trichloroethan	6.47	83	88898	25.28 ug/L		99
49) C210	4-Methyl-2-pentanone	6.00	43	549117	131.00 ug/L		94
50) C220	Tetrachloroethene	6.53	166	139217	24.47 ug/L		99
51) C221	1,3-Dichloropropane	6.59	76	194707	24.40 ug/L		98
52) C155	Dibromochloromethane	6.77	129	95226	24.38 ug/L		99
53) C163	1,2-Dibromoethane	6.85	107	107705	25.58 ug/L		96
54) C215	2-Hexanone	6.63	43	386506	134.33 ug/L		93
55) C235	Chlorobenzene	7.21	112	347663	24.20 ug/L		98
56) C281	1,1,1,2-Tetrachloroe	7.28	131	108685	26.45 ug/L		99
57) C240	Ethylbenzene	7.27	91	646592	24.82 ug/L		99
58) C246	m,p-Xylene	7.36	106	500061	49.34 ug/L		97
59) C247	o-Xylene	7.68	106	237009	24.72 ug/L		94
60) C245	Styrene	7.71	104	405089	29.62 ug/L		94
61) C180	Bromoform	7.89	173	56129	23.90 ug/L		100
64) C966	Isopropylbenzene	7.97	105	651556	25.52 ug/L		98
65) C301	Bromobenzene	8.24	156	139791	24.36 ug/L		93
66) C225	1,1,2,2-Tetrachloroe	8.26	83	138007	26.59 ug/L		99
67) C282	1,2,3-Trichloropropa	8.30	110	41060	23.38 ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	92982	97.32 ug/L	#	47
69) C302	n-Propylbenzene	8.30	91	778377	24.36 ug/L		94
70) C303	2-Chlorotoluene	8.39	126	143537	24.60 ug/L		100
71) C289	4-Chlorotoluene	8.47	126	145646	24.58 ug/L		100
72) C304	1,3,5-Trimethylbenze	8.44	105	527517	25.08 ug/L		97
73) C306	tert-Butylbenzene	8.70	134	119324	25.27 ug/L	#	89
74) C307	1,2,4-Trimethylbenze	8.74	105	520783	25.52 ug/L		97
75) C308	sec-Butylbenzene	8.87	105	683895	27.04 ug/L		96
76) C260	1,3-Dichlorobenzene	8.99	146	269239	24.04 ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	549738	24.61 ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	275432	23.94 ug/L		98
79) C249	1,2-Dichlorobenzene	9.38	146	258247	24.06 ug/L		98
80) C310	n-Butylbenzene	9.33	91	466672	24.76 ug/L		97
81) C286	1,2-Dibromo-3-Chloro	10.05	75	19745	22.85 ug/L		95
82) C313	1,2,4-Trichlorobenze	10.70	180	142417	24.62 ug/L		99
83) C316	Hexachlorobutadiene	10.81	225	57112	24.12 ug/L		98
84) C314	Naphthalene	10.91	128	327021	26.35 ug/L		98
85) C934	1,2,3-Trichlorobenze	11.10	180	129400	24.77 ug/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDCHEM\S\DATA\112309\S1070.D Vial: 11
Acq On : 23 Nov 2009 18:30 Operator: RJ
Sample : RK91904-SCV1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 23 22:49:56 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Mon Nov 23 22:49:21 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973G	Calibration:	R9K1805
Lab File ID:	G6459.D	Calibration Date:	11/18/09 13:08
Sequence:	RK92704	Injection Date:	11/27/09
Lab Sample ID:	RK92704-CCV1	Injection Time:	10:12

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1-Trichloroethane	A	25.0	23.0	0.6202141	0.5695956		-8.2	
1,1,2,2-Tetrachloroethane	A	25.0	21.3	0.8081111	0.6899344	0.3	-14.6	
1,1,2-Trichloroethane	A	25.0	22.9	0.5181704	0.4746293		-8.4	
1,1,2-Trichlorotrifluoroethane	A	25.0	30.8	0.2418924	0.2978242		23.1	
1,1-Dichloroethane	A	25.0	22.6	0.772281	0.6995736	0.1	-9.4	
1,1-Dichloroethene	A	25.0	22.0	0.3493009	0.3079895		-11.8	
1,2,4-Trichlorobenzene	A	25.0	20.2	1.005473	0.8112303		-19.3	
1,2-Dibromo-3-chloropropane	A	25.0	22.3	0.1175203	0.1047103		-10.9	
1,2-Dibromoethane (EDB)	A	25.0	23.0	0.6241909	0.5742081		-8.0	
1,2-Dichlorobenzene	A	25.0	20.0	1.742775	1.39502		-20.0	
1,2-Dichloroethane	A	25.0	23.7	0.5436578	0.5145432		-5.4	
1,2-Dichloroethane-d4	A	25.0	25.2	0.3429138	0.3451079		0.6	
1,2-Dichloropropane	A	25.0	22.8	0.4036245	0.3680667		-8.8	
1,3-Dichlorobenzene	A	25.0	19.9	1.854372	1.475916		-20.4	
1,4-Dichlorobenzene	A	25.0	19.7	1.928032	1.517981		-21.3	
2-Butanone (MEK)	L0	125	151	0.1505176	0.1604422		20.6	
2-Hexanone	A	125	142	0.4808882	0.545238		13.4	
4-Bromofluorobenzene	A	25.0	24.3	0.750396	0.7301079		-2.7	
4-Methyl-2-pentanone (MIBK)	A	125	141	0.6830171	0.7677941		12.4	
Acetone	L0	125	153	0.1013717	0.1097772		22.5	
Benzene	A	25.0	22.4	1.68649	1.507484		-10.6	
Bromodichloromethane	A	25.0	23.3	0.4898165	0.4562519		-6.9	
Bromoform	L0	25.0	19.0	0.3797234	0.3427038	0.1	-24.0	
Bromomethane	L0	25.0	27.5	0.1138624	0.1013202		9.9	
Carbon disulfide	A	25.0	34.1	0.7838286	1.069565		36.5	
Carbon Tetrachloride	A	25.0	22.0	0.5141529	0.4522517		-12.0	
Chlorobenzene	A	25.0	22.1	2.381806	2.104847	0.3	-11.6	
Chlorodibromomethane	A	25.0	22.7	0.6677062	0.6069471		-9.1	
Chloroethane	A	25.0	24.5	0.2246093	0.2203399		-1.9	

Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973G	Calibration:	R9K1805
Lab File ID:	G6459.D	Calibration Date:	11/18/09 13:08
Sequence:	RK92704	Injection Date:	11/27/09
Lab Sample ID:	RK92704-CCV1	Injection Time:	10:12

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Chloroform	A	25.0	22.9	0.7485764	0.6845862		-8.5	
Chloromethane	A	25.0	22.7	0.3715143	0.3369485	0.1	-9.3	
cis-1,2-Dichloroethene	A	25.0	22.6	0.4689887	0.4246648		-9.5	
cis-1,3-Dichloropropene	A	25.0	23.1	0.5932669	0.5482606		-7.6	
Cyclohexane	A	25.0	29.1	0.5794773	0.6734947		16.2	
Dichlorodifluoromethane	A	25.0	27.4	0.3320568	0.3634153		9.4	
Ethylbenzene	A	25.0	22.3	4.111063	3.6692		-10.7	
Isopropylbenzene	A	25.0	20.5	4.243101	3.472685		-18.2	
Methyl Acetate	L0	25.0	28.4	0.4246838	0.4354697		13.7	
Methyl tert-Butyl Ether	A	25.0	30.7	0.8909668	1.095114		22.9	
Methylcyclohexane	A	25.0	29.3	0.6337622	0.743769		17.4	
Methylene Chloride	L0	25.0	23.3	0.4490275	0.3767153		-6.7	
Styrene	A	25.0	23.4	2.090416	1.958519		-6.3	
Tetrachloroethene	A	25.0	22.0	0.9175051	0.8056142		-12.2	
Toluene	A	25.0	22.1	2.139913	1.892274		-11.6	
Toluene-d8	A	25.0	24.8	2.380409	2.362801		-0.7	
trans-1,2-Dichloroethene	A	25.0	22.3	0.4285549	0.3819977		-10.9	
trans-1,3-Dichloropropene	A	25.0	23.9	1.030711	0.9858635		-4.4	
Trichloroethene	A	25.0	22.3	0.4213793	0.3763217		-10.7	
Trichlorofluoromethane	A	25.0	25.1	0.5470122	0.5486513		0.3	
Vinyl chloride	A	25.0	24.9	0.3631248	0.3614847		-0.5	
Xylenes, total	A	75.0	66.5	1.59147	1.411507		-11.3	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Calibration Type Legend:
A: Average RF
L: Linear through Intercept
Q: Quadratic
L0: Linear forced through Zero
L1: 1/x Weighted Linear through Intercept
L2: 1/x2 Weighted Linear through Intercept
L01: 1/x Weighted Linear forced through Zero
L02: 1/x2 Weighted Linear forced through Zero

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6459.D Vial: 2
Acq On : 27 Nov 2009 10:12 Operator: DHC
Sample : RK92704-CCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 27 10:41:48 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 09:40:58 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112509\G6431.D (25 Nov 2009 21:09)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.45	114	345489	25.00	ug/L	0.00 114.45%
43) CI20	Chlorobenzene-D5	8.32	82	173310	25.00	ug/L	0.00 113.08%
63) CI30	1,4-Dichlorobenzene-	10.73	152	182026	25.00	ug/L	0.00 123.89%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.75	111	98114	23.77	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	95.08%		
31) CS15	1,2-Dichloroethane-D	5.06	65	119231	25.16	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	100.64%		
44) CS05	Toluene-D8	6.85	98	409497	24.82	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	99.28%		
62) CS10	p-Bromofluorobenzene	9.58	174	126535	24.32	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	97.28%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.27	85	125556	27.36	ug/L #	100
3) C010	Chloromethane	1.40	50	116412	22.67	ug/L	98
4) C020	Vinyl chloride	1.51	62	124889	24.89	ug/L	88
5) C015	Bromomethane	1.78	94	35005	27.47	ug/L	86
6) C025	Chloroethane	1.88	64	76125	24.52	ug/L	90
7) C275	Trichlorofluorometha	2.07	101	189553m	25.07	ug/L	98
8) C045	1,1-Dichloroethene	2.59	96	106407	22.04	ug/L	94
9) C030	Methylene chloride	3.09	84	130151	23.33	ug/L	91
10) C040	Carbon disulfide	2.78	76	369523	34.11	ug/L	100
11) C036	Acrolein	2.54	56	168394	1084.03	ug/L	95
12) C038	Acrylonitrile	3.37	53	195515	141.18	ug/L	92
13) C035	Acetone	2.71	43	189634	153.13	ug/L	99
14) C300	Acetonitrile	3.00	41	543673	1113.64	ug/L	98
15) C276	Iodomethane	2.74	142	200661	28.88	ug/L	99
16) C291	1,1,2-Trichloro-1,2,	2.61	101	102895	30.78	ug/L	98
17) C962	T-butyl Methyl Ether	3.32	73	378350	30.73	ug/L	97
18) C057	trans-1,2-Dichloroet	3.32	96	131976	22.28	ug/L	99
19) C255	Methyl Acetate	3.00	43	150450	28.42	ug/L	95
20) C050	1,1-Dichloroethane	3.73	63	241695	22.65	ug/L	98
21) C125	Vinyl Acetate	3.79	43	1157447	150.71	ug/L	96
22) C051	2,2-Dichloropropane	4.26	77	151205	23.23	ug/L	95
23) C056	cis-1,2-Dichloroethe	4.28	96	146717	22.64	ug/L	98
24) C272	Tetrahydrofuran	4.56	42	183672	145.57	ug/L	90
25) C222	Bromochloromethane	4.52	128	64545	22.20	ug/L	99
27) C060	Chloroform	4.60	83	236517	22.86	ug/L	98
28) C115	1,1,1-Trichloroethan	4.71	97	196789	22.96	ug/L	98
29) C120	Carbon tetrachloride	4.85	117	156248	21.99	ug/L	99
30) C116	1,1-Dichloropropene	4.87	75	176297	22.39	ug/L	98
32) C165	Benzene	5.07	78	520819	22.35	ug/L	100
33) C065	1,2-Dichloroethane	5.13	62	177769	23.66	ug/L	100
34) C110	2-Butanone	4.32	43	277155	150.73	ug/L	95
35) C256	Cyclohexane	4.73	56	232685	29.06	ug/L	94
36) C150	Trichloroethene	5.68	95	130015	22.33	ug/L	96
37) C140	1,2-Dichloropropane	5.91	63	127163	22.80	ug/L	99
38) C278	Dibromomethane	6.05	93	68182	22.94	ug/L	97

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6459.D Vial: 2
Acq On : 27 Nov 2009 10:12 Operator: DHC
Sample : RK92704-CCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 27 10:41:48 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 09:40:58 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112509\G6431.D (25 Nov 2009 21:09)

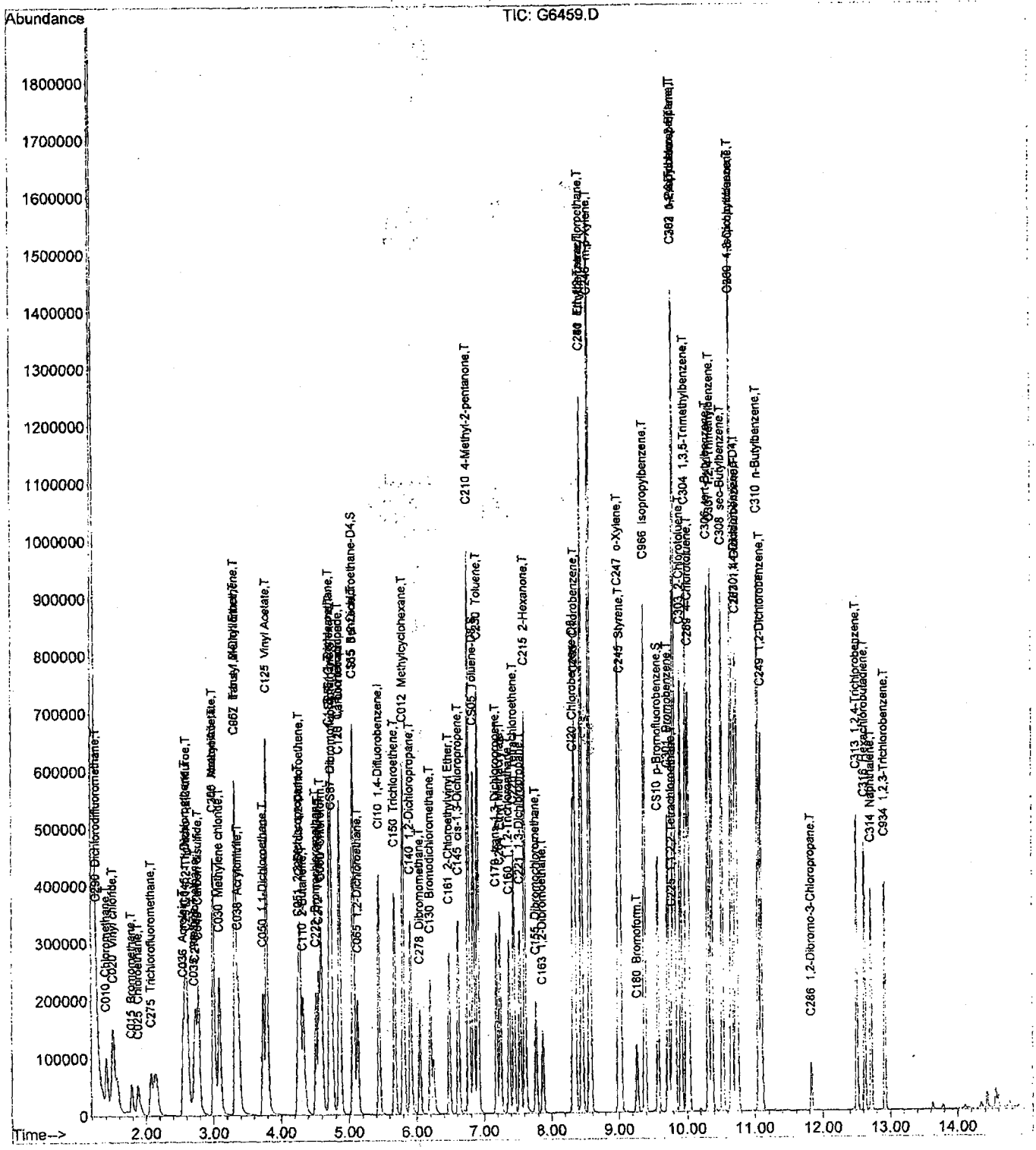
Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.20	83	157630	23.29 ug/L		99
40) C161	2-Chloroethylvinyl E	6.48	63	120524	208.18 ug/L		97
41) C012	Methylcyclohexane	5.81	83	256964	29.34 ug/L		97
42) C145	cis-1,3-Dichloroprop	6.62	75	189418	23.10 ug/L		100
45) C230	Toluene	6.91	92	327950	22.11 ug/L		94
46) C170	trans-1,3-Dichloropr	7.19	75	170860	23.91 ug/L		98
47) C284	Ethyl Methacrylate	7.24	69	180076	32.01 ug/L	#	95
48) C160	1,1,2-Trichloroethan	7.37	83	82258	22.90 ug/L		98
49) C210	4-Methyl-2-pentanone	6.77	43	665332	140.52 ug/L		95
50) C220	Tetrachloroethene	7.45	166	139621	21.95 ug/L		98
51) C221	1,3-Dichloropropane	7.54	76	188511	23.20 ug/L		100
52) C155	Dibromochloromethane	7.77	129	105190	22.73 ug/L		99
53) C163	1,2-Dibromoethane	7.87	107	99516	23.00 ug/L		95
54) C215	2-Hexanone	7.61	43	472476	141.73 ug/L		95
55) C235	Chlorobenzene	8.35	112	364791	22.09 ug/L		99
56) C281	1,1,1,2-Tetrachloroe	8.45	131	124224	22.81 ug/L		99
57) C240	Ethylbenzene	8.45	91	635909	22.31 ug/L		100
58) C246	m,p-Xylene	8.57	106	493375	44.51 ug/L		96
59) C247	o-Xylene	8.99	106	240510	22.00 ug/L		93
60) C245	Styrene	9.02	104	339431	23.42 ug/L		100
61) C180	Bromoform	9.27	173	59394	19.01 ug/L		98
64) C966	Isopropylbenzene	9.38	105	632119	20.46 ug/L		98
65) C301	Bromobenzene	9.73	156	146593	19.75 ug/L		92
66) C225	1,1,2,2-Tetrachloroe	9.78	83	125586	21.34 ug/L		97
67) C282	1,2,3-Trichloropropa	9.81	110	39927	21.52 ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.82	51	88357	92.10 ug/L	#	43
69) C302	n-Propylbenzene	9.82	91	763293	20.74 ug/L		95
70) C303	2-Chlorotoluene	9.91	126	144493	19.85 ug/L		100
71) C289	4-Chlorotoluene	10.03	126	148018	19.90 ug/L		100
72) C304	1,3,5-Trimethylbenze	9.99	105	532064	20.81 ug/L		97
73) C306	tert-Butylbenzene	10.31	134	119027	20.38 ug/L	#	95
74) C307	1,2,4-Trimethylbenze	10.37	105	513702	20.65 ug/L		99
75) C308	sec-Butylbenzene	10.52	105	606087	20.48 ug/L		98
76) C260	1,3-Dichlorobenzene	10.66	146	268655	19.90 ug/L		99
77) C309	4-Isopropyltoluene	10.66	119	547194	20.75 ug/L		98
78) C267	1,4-Dichlorobenzene	10.74	146	276312	19.68 ug/L		97
79) C249	1,2-Dichlorobenzene	11.10	146	253930	20.01 ug/L		98
80) C310	n-Butylbenzene	11.05	91	482365	20.46 ug/L		98
81) C286	1,2-Dibromo-3-Chloro	11.82	75	19060	22.27 ug/L		82
82) C313	1,2,4-Trichlorobenze	12.51	180	147665	20.17 ug/L		99
83) C316	Hexachlorobutadiene	12.62	225	79794	19.83 ug/L		100
84) C314	Naphthalene	12.72	128	280395	21.45 ug/L		99
85) C934	1,2,3-Trichlorobenze	12.92	180	117108	20.49 ug/L		100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6459.D Vial: 2
Acq On : 27 Nov 2009 10:12 Operator: DHC
Sample : RK92704-CCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 27 10:41:48 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 09:40:58 2009
Response via : Initial Calibration
DataAcq Meth : VOA

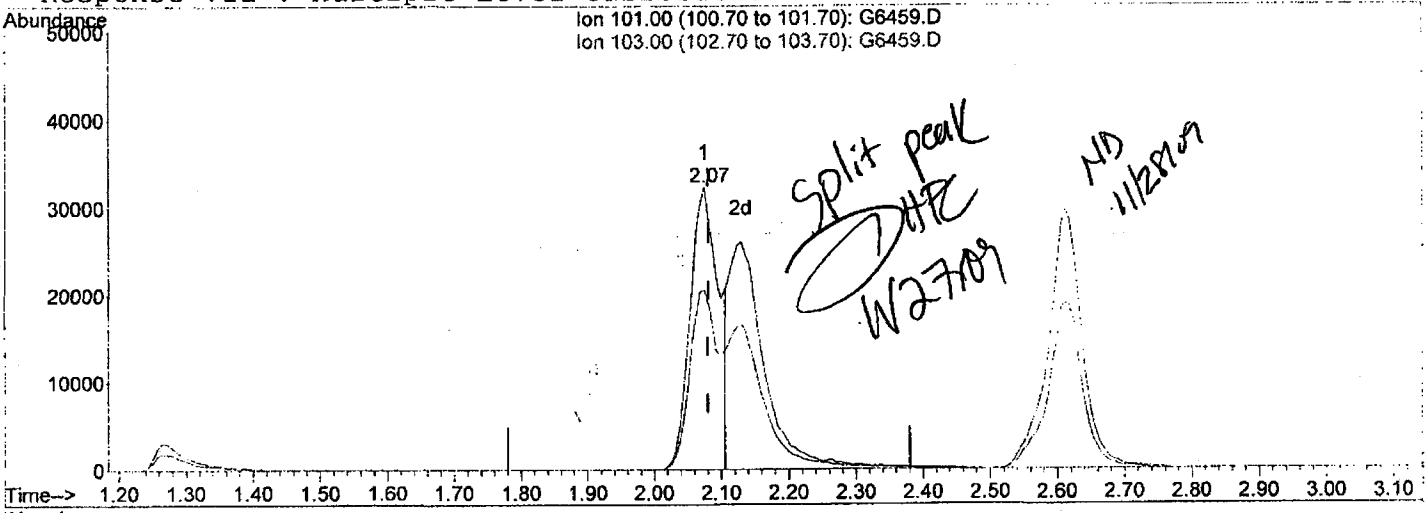


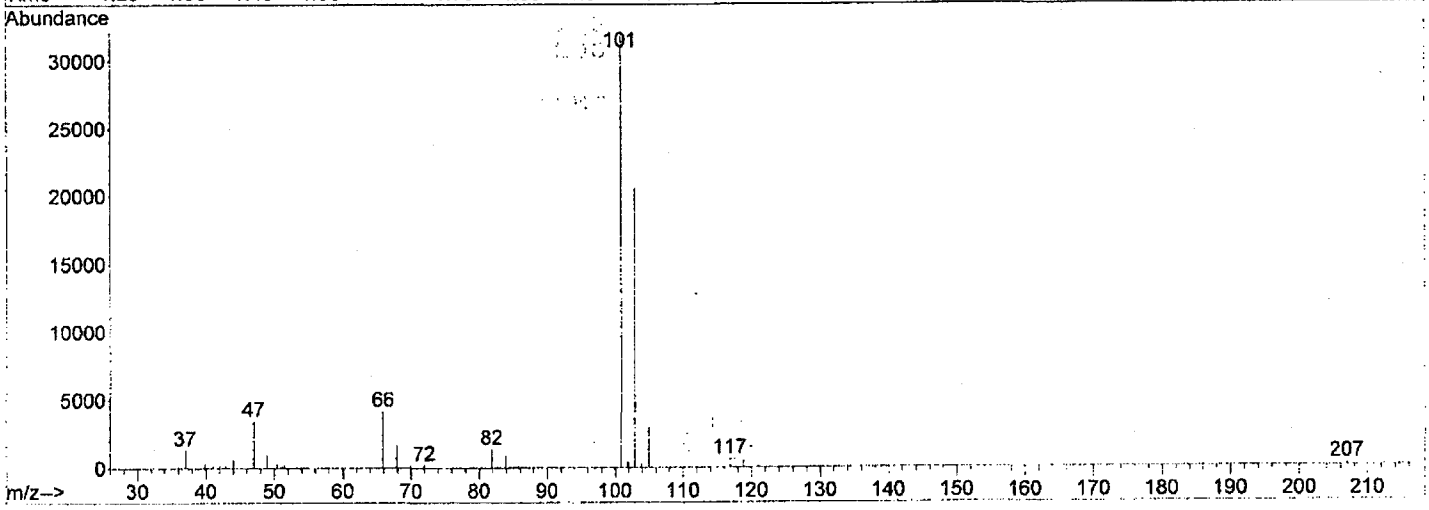
Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\112709\G6459.D
Acq On : 27 Nov 2009 10:12
Sample : RK92704-CCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 27 10:41:30 2009

Vial: 2
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 09:40:58 2009
Response via : Multiple Level Calibration





TIC: G6459.D

(7) C275 Trichlorofluoromethane (T)

2.07min (-0.006) 12.52ug/L

response 94632

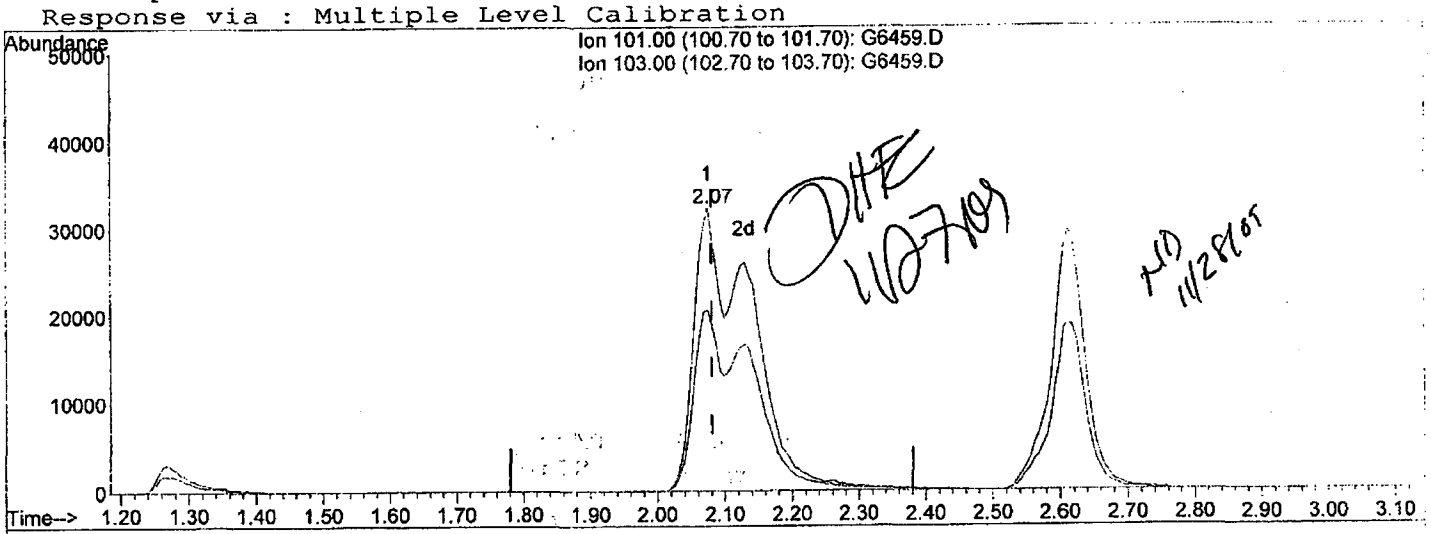
Ion	Exp%	Act%
101.00	100	100
103.00	64.90	63.58
0.00	0.00	0.00
0.00	0.00	0.00

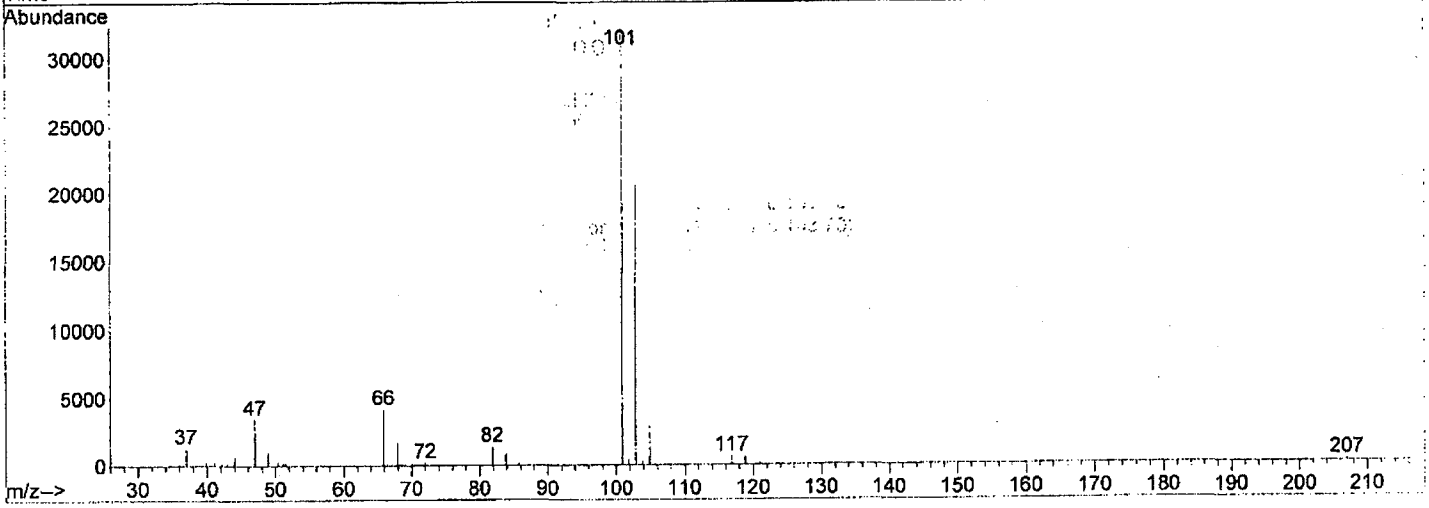
Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\112709\G6459.D
Acq On : 27 Nov 2009 10:12
Sample : RK92704-CCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 27 10:41:30 2009

Vial: 2
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 09:40:58 2009
Response via : Multiple Level Calibration





TIC: G6459.D

(7) C275 Trichlorofluoromethane (T)

2.07min (-0.006) 25.07ug/L m

response 189553

Ion	Exp%	Act%
101.00	100	100
103.00	64.90	63.58
0.00	0.00	0.00
0.00	0.00	0.00

Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973G	Calibration:	R9K1805
Lab File ID:	G6503.D	Calibration Date:	11/18/09 13:08
Sequence:	RK93007	Injection Date:	11/30/09
Lab Sample ID:	RK93007-CCV1	Injection Time:	10:30

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1-Trichloroethane	A	25.0	26.2	0.6202141	0.6513431		5.0	
1,1,2,2-Tetrachloroethane	A	25.0	25.6	0.8081111	0.8270323	0.3	2.3	
1,1,2-Trichloroethane	A	25.0	23.9	0.5181704	0.4955949		-4.4	
1,1,2-Trichlorotrifluoroethane	A	25.0	33.0	0.2418924	0.3192391		32.0	
1,1-Dichloroethane	A	25.0	25.6	0.772281	0.7911864	0.1	2.4	
1,1-Dichloroethene	A	25.0	25.4	0.3493009	0.3555396		1.8	
1,2,4-Trichlorobenzene	A	25.0	23.0	1.005473	0.9248389		-8.0	
1,2-Dibromo-3-chloropropane	A	25.0	27.9	0.1175203	0.1310913		11.5	
1,2-Dibromoethane (EDB)	A	25.0	24.8	0.6241909	0.6179969		-1.0	
1,2-Dichlorobenzene	A	25.0	22.9	1.742775	1.596062		-8.4	
1,2-Dichloroethane	A	25.0	26.3	0.5436578	0.5712199		5.1	
1,2-Dichloroethane-d4	A	25.0	27.0	0.3429138	0.369795		7.8	
1,2-Dichloropropane	A	25.0	23.8	0.4036245	0.384741		-4.7	
1,3-Dichlorobenzene	A	25.0	22.4	1.854372	1.663114		-10.3	
1,4-Dichlorobenzene	A	25.0	21.7	1.928032	1.675275		-13.1	
2-Butanone (MEK)	L0	125	173	0.1505176	0.1836444		38.0	
2-Hexanone	A	125	166	0.4808882	0.6392169		32.9	
4-Bromofluorobenzene	A	25.0	25.2	0.750396	0.7564343		0.8	
4-Methyl-2-pentanone (MIBK)	A	125	159	0.6830171	0.8668363		26.9	
Acetone	L0	125	189	0.1013717	0.1355209		51.2	
Benzene	A	25.0	24.4	1.68649	1.646322		-2.4	
Bromodichloromethane	A	25.0	24.8	0.4898165	0.4852354		-0.9	
Bromoform	L0	25.0	20.6	0.3797234	0.3722704	0.1	-17.4	
Bromomethane	L0	25.0	28.6	0.1138624	0.105608		14.5	
Carbon disulfide	A	25.0	35.5	0.7838286	1.114199		42.1	
Carbon Tetrachloride	A	25.0	25.8	0.5141529	0.5299651		3.1	
Chlorobenzene	A	25.0	23.1	2.381806	2.203762	0.3	-7.5	
Chlorodibromomethane	A	25.0	23.6	0.6677062	0.6289245		-5.8	
Chloroethane	A	25.0	24.7	0.2246093	0.2221271		-1.1	

Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973G	Calibration:	R9K1805
Lab File ID:	G6503.D	Calibration Date:	11/18/09 13:08
Sequence:	RK93007	Injection Date:	11/30/09
Lab Sample ID:	RK93007-CCV1	Injection Time:	10:30

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Chloroform	A	25.0	25.6	0.7485764	0.7677159		2.6	
Chloromethane	A	25.0	24.9	0.3715143	0.3702246	0.1	-0.3	
cis-1,2-Dichloroethene	A	25.0	25.9	0.4689887	0.4853882		3.5	
cis-1,3-Dichloropropene	A	25.0	24.1	0.5932669	0.5721045		-3.6	
Cyclohexane	A	25.0	32.3	0.5794773	0.7485697		29.2	
Dichlorodifluoromethane	A	25.0	30.8	0.3320568	0.4092743		23.3	
Ethylbenzene	A	25.0	23.4	4.111063	3.843007		-6.5	
Isopropylbenzene	A	25.0	23.0	4.243101	3.905187		-8.0	
Methyl Acetate	L0	25.0	34.7	0.4246838	0.5317979		38.8	
Methyl tert-Butyl Ether	A	25.0	37.0	0.8909668	1.319395		48.1	
Methylcyclohexane	A	25.0	33.4	0.6337622	0.8460858		33.5	
Methylene Chloride	L0	25.0	27.3	0.4490275	0.4405663		9.1	
Styrene	A	25.0	24.9	2.090416	2.08131		-0.4	
Tetrachloroethene	A	25.0	22.5	0.9175051	0.825653		-10.0	
Toluene	A	25.0	22.6	2.139913	1.934434		-9.6	
Toluene-d8	A	25.0	24.0	2.380409	2.288155		-3.9	
trans-1,2-Dichloroethene	A	25.0	25.5	0.4285549	0.4371933		2.0	
trans-1,3-Dichloropropene	A	25.0	24.6	1.030711	1.014952		-1.5	
Trichloroethene	A	25.0	24.2	0.4213793	0.4080938		-3.2	
Trichlorofluoromethane	A	25.0	27.5	0.5470122	0.6009591		9.9	
Vinyl chloride	A	25.0	27.6	0.3631248	0.4008579		10.4	
Xylenes, total	A	75.0	70.6	1.59147	1.497025		-5.9	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Calibration Type Legend:
A: Average RF
L: Linear through Intercept
Q: Quadratic
L0: Linear forced through Zero
L1: 1/x Weighted Linear through Intercept
L2: 1/x2 Weighted Linear through Intercept
L01: 1/x Weighted Linear forced through Zero
L02: 1/x2 Weighted Linear forced through Zero

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\113009\G6503.D Vial: 2
Acq On : 30 Nov 2009 10:30 Operator: RJ
Sample : RK93007-CCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 30 10:47:20 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Sat Nov 28 12:26:38 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112809\G6478.D (28 Nov 2009 10:27)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.45	114	314266	25.00	ug/L	0.00 92.54%
43) CI20	Chlorobenzene-D5	8.32	82	161517	25.00	ug/L	0.00 92.75%
63) CI30	1,4-Dichlorobenzene-	10.73	152	161666	25.00	ug/L	0.00 93.97%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.76	111	97261	25.91	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	103.64%	
31) CS15	1,2-Dichloroethane-D	5.06	65	116214	26.96	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	107.84%	
44) CS05	Toluene-D8	6.85	98	369576	24.03	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	96.12%	
62) CS10	p-Bromofluorobenzene	9.58	174	122177	25.20	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	100.80%	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.28	85	128621	30.81	ug/L #	100
3) C010	Chloromethane	1.42	50	116349	24.91	ug/L	99
4) C020	Vinyl chloride	1.53	62	125976	27.60	ug/L	87
5) C015	Bromomethane	1.79	94	33189	28.63	ug/L	89
6) C025	Chloroethane	1.89	64	69807	24.72	ug/L	90
7) C275	Trichlorofluorometha	2.09	101	188861m	27.47	ug/L	98
8) C045	1,1-Dichloroethene	2.59	96	111734	25.45	ug/L	97
9) C030	Methylene chloride	3.10	84	138455	27.28	ug/L	92
10) C040	Carbon disulfide	2.79	76	350155	35.54	ug/L	100
11) C036	Acrolein	2.56	56	182435	1291.10	ug/L	96
12) C038	Acrylonitrile	3.37	53	220419	174.98	ug/L	93
13) C035	Acetone	2.72	43	212948	189.04	ug/L	98
14) C300	Acetonitrile	3.01	41	610039	1373.73	ug/L	98
15) C276	Iodomethane	2.75	142	204890	32.42	ug/L	99
16) C291	1,1,2-Trichloro-1,2,	2.62	101	100326	32.99	ug/L	97
17) C962	T-butyl Methyl Ether	3.32	73	414641	37.02	ug/L	97
18) C057	trans-1,2-Dichloroet	3.33	96	137395	25.50	ug/L	99
19) C255	Methyl Acetate	3.01	43	167126	34.71	ug/L	94
20) C050	1,1-Dichloroethane	3.74	63	248643	25.61	ug/L	100
21) C125	Vinyl Acetate	3.79	43	1135124	162.49	ug/L	96
22) C051	2,2-Dichloropropane	4.26	77	151082	25.51	ug/L	95
23) C056	cis-1,2-Dichloroethe	4.29	96	152541	25.87	ug/L	98
24) C272	Tetrahydrofuran	4.56	42	196993	171.64	ug/L	88
25) C222	Bromochloromethane	4.53	128	68656	25.96	ug/L	95
27) C060	Chloroform	4.60	83	241267	25.64	ug/L	97
28) C115	1,1,1-Trichloroethan	4.72	97	204695	26.25	ug/L	98
29) C120	Carbon tetrachloride	4.86	117	166550	25.77	ug/L	99
30) C116	1,1-Dichloropropene	4.87	75	176688	24.67	ug/L	99
32) C165	Benzene	5.07	78	517383	24.40	ug/L	99
33) C065	1,2-Dichloroethane	5.13	62	179515	26.27	ug/L	99
34) C110	2-Butanone	4.33	43	288566	172.53	ug/L	94
35) C256	Cyclohexane	4.73	56	235250	32.30	ug/L	94
36) C150	Trichloroethene	5.68	95	128250	24.21	ug/L	96
37) C140	1,2-Dichloropropane	5.92	63	120911	23.83	ug/L	99
38) C278	Dibromomethane	6.05	93	68904	25.49	ug/L	93

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\113009\G6503.D Vial: 2
Acq On : 30 Nov 2009 10:30 Operator: RJ
Sample : RK93007-CCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 30 10:47:20 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Sat Nov 28 12:26:38 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112809\G6478.D (28 Nov 2009 10:27)

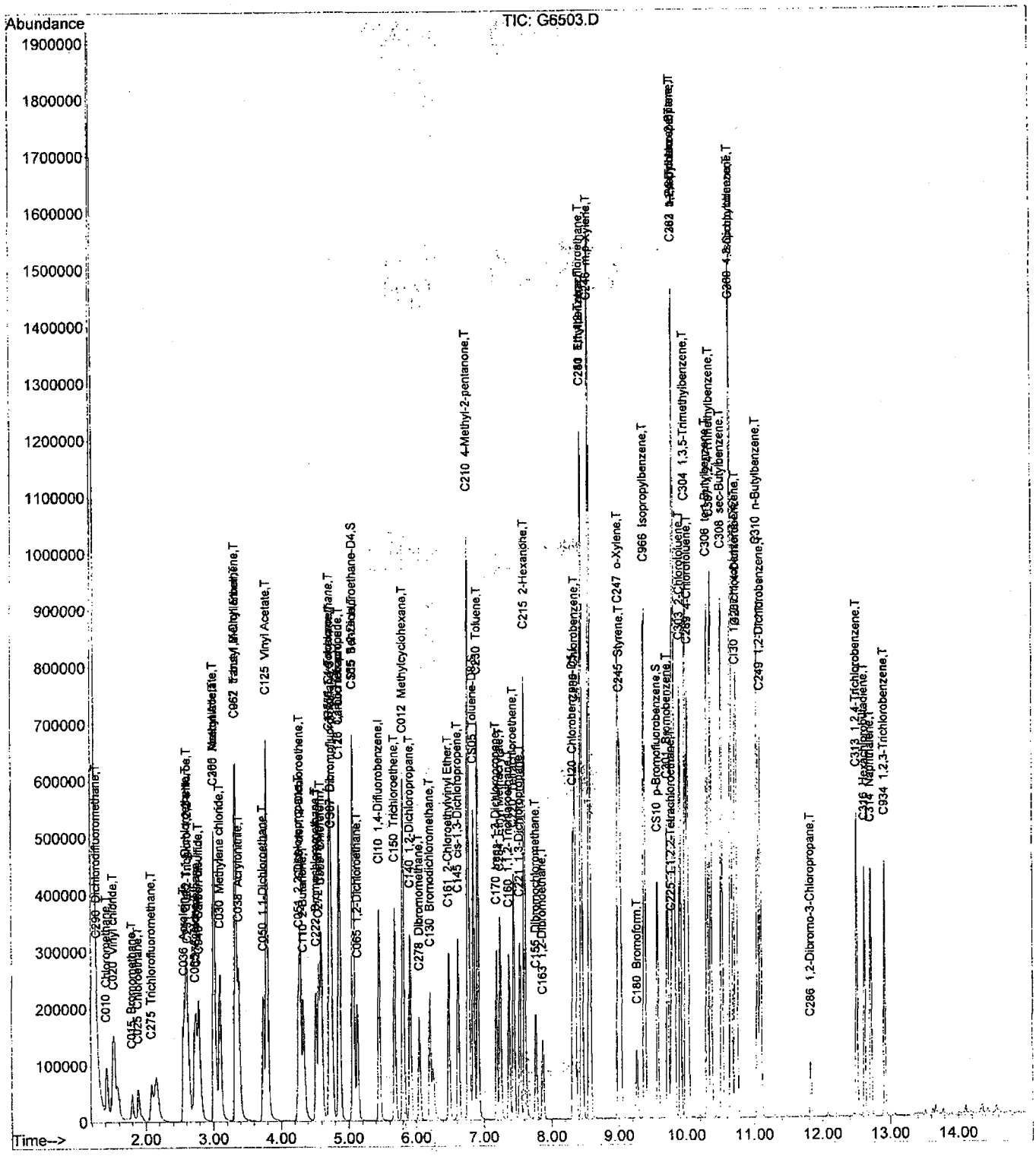
Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.21	83	152493	24.77	ug/L		99
40) C161	2-Chloroethylvinyl E	6.48	63	126808	234.56	ug/L		96
41) C012	Methylcyclohexane	5.81	83	265896	33.38	ug/L		96
42) C145	cis-1,3-Dichloroprop	6.62	75	179793	24.11	ug/L		98
45) C230	Toluene	6.92	92	312444	22.60	ug/L		93
46) C170	trans-1,3-Dichloropr	7.19	75	163932	24.62	ug/L		97
47) C284	Ethyl Methacrylate	7.24	69	178928	34.13	ug/L	#	94
48) C160	1,1,2-Trichloroethan	7.37	83	80047	23.91	ug/L		98
49) C210	4-Methyl-2-pentanone	6.77	43	700044	158.64	ug/L		94
50) C220	Tetrachloroethene	7.45	166	133357	22.50	ug/L		96
51) C221	1,3-Dichloropropane	7.54	76	182216	24.06	ug/L		98
52) C155	Dibromochloromethane	7.77	129	101582	23.55	ug/L		99
53) C163	1,2-Dibromoethane	7.87	107	99817	24.75	ug/L		99
54) C215	2-Hexanone	7.61	43	516222	166.16	ug/L		94
55) C235	Chlorobenzene	8.35	112	355945	23.13	ug/L		99
56) C281	1,1,1,2-Tetrachloroe	8.45	131	123036	24.24	ug/L		99
57) C240	Ethylbenzene	8.45	91	620711	23.37	ug/L		100
58) C246	m,p-Xylene	8.57	106	484693	46.92	ug/L		97
59) C247	o-Xylene	8.99	106	240692	23.63	ug/L		94
60) C245	Styrene	9.02	104	336167	24.89	ug/L		100
61) C180	Bromoform	9.27	173	60128	20.65	ug/L		97
64) C966	Isopropylbenzene	9.38	105	631336	23.01	ug/L		98
65) C301	Bromobenzene	9.73	156	147791	22.42	ug/L		94
66) C225	1,1,2,2-Tetrachloroe	9.78	83	133703	25.59	ug/L		97
67) C282	1,2,3-Trichloropropa	9.81	110	42748	25.94	ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.82	51	87543	102.75	ug/L	#	44
69) C302	n-Propylbenzene	9.82	91	764482	23.39	ug/L		96
70) C303	2-Chlorotoluene	9.91	126	146080	22.60	ug/L		100
71) C289	4-Chlorotoluene	10.03	126	146045	22.10	ug/L		100
72) C304	1,3,5-Trimethylbenze	9.99	105	533863	23.51	ug/L		97
73) C306	tert-Butylbenzene	10.31	134	118259	22.80	ug/L	#	92
74) C307	1,2,4-Trimethylbenze	10.37	105	524241	23.72	ug/L		97
75) C308	sec-Butylbenzene	10.52	105	613565	23.34	ug/L		97
76) C260	1,3-Dichlorobenzene	10.66	146	268869	22.42	ug/L		100
77) C309	4-Isopropyltoluene	10.66	119	557902	23.83	ug/L		98
78) C267	1,4-Dichlorobenzene	10.74	146	270835	21.72	ug/L		98
79) C249	1,2-Dichlorobenzene	11.10	146	258029	22.90	ug/L		98
80) C310	n-Butylbenzene	11.05	91	483940	23.12	ug/L		99
81) C286	1,2-Dibromo-3-Chloro	11.82	75	21193	27.89	ug/L		79
82) C313	1,2,4-Trichlorobenze	12.51	180	149515	23.00	ug/L		99
83) C316	Hexachlorobutadiene	12.62	225	76760	21.48	ug/L		100
84) C314	Naphthalene	12.72	128	320728	27.63	ug/L		98
85) C934	1,2,3-Trichlorobenze	12.92	180	124144	24.46	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\G\Data\113009\G6503.D Vial: 2
Acq On : 30 Nov 2009 10:30 Operator: RJ
Sample : RK93007-CCV1 Inst : HP5973G
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 30 10:47:20 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Sat Nov 28 12:26:38 2009
Response via : Initial Calibration
DataAcq Meth : VOA

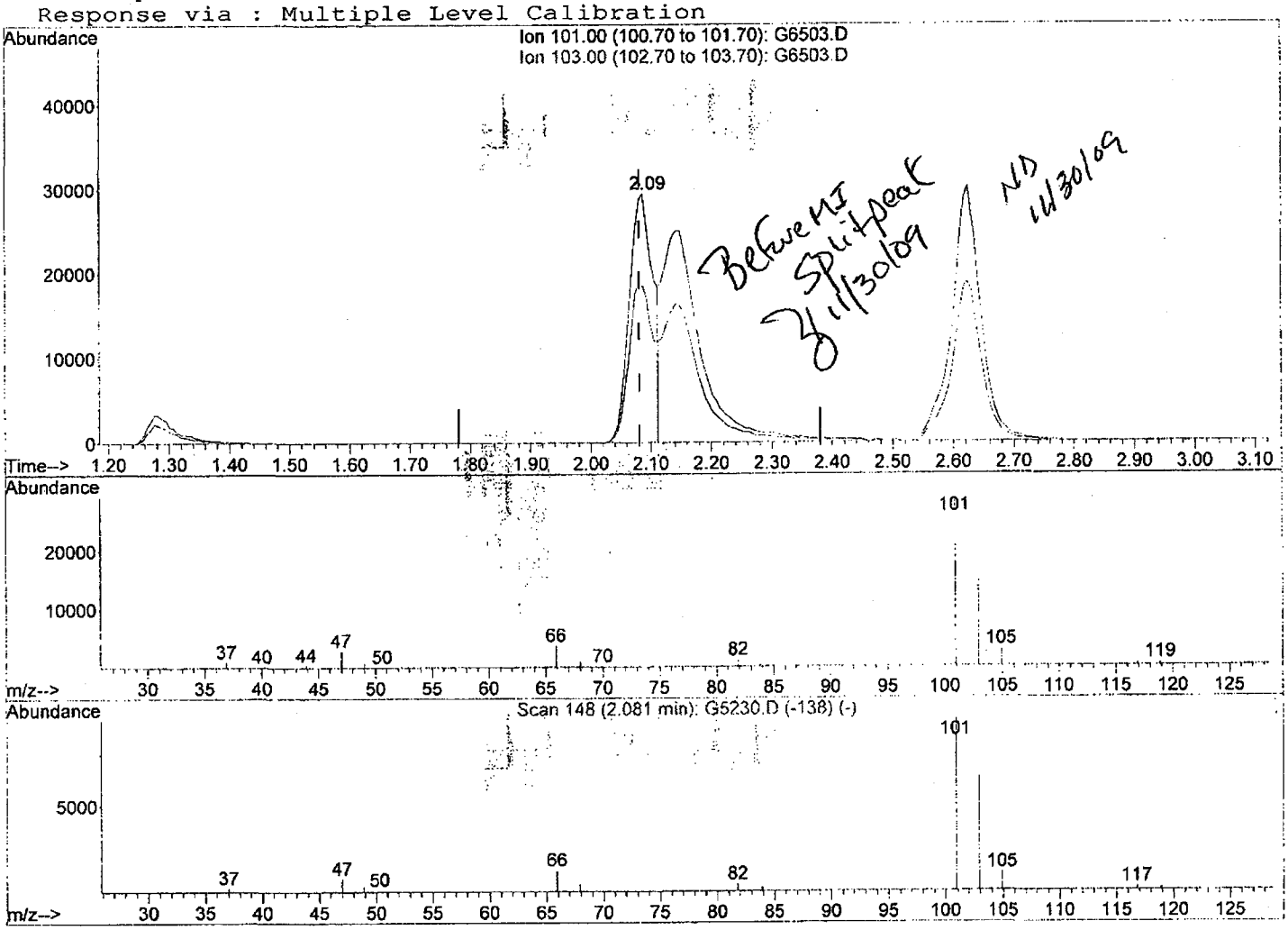


Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\113009\G6503.D
Acq On : 30 Nov 2009 10:30
Sample : RK93007-CCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 30 10:46:50 2009

Vial: 2
Operator: RJ
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Sat Nov 28 12:26:38 2009
Response via : Multiple Level Calibration



TIC: G6503.D

(7) C275 Trichlorofluoromethane (T)

2.09min (+0.006) 11.64ug/L

response 80006

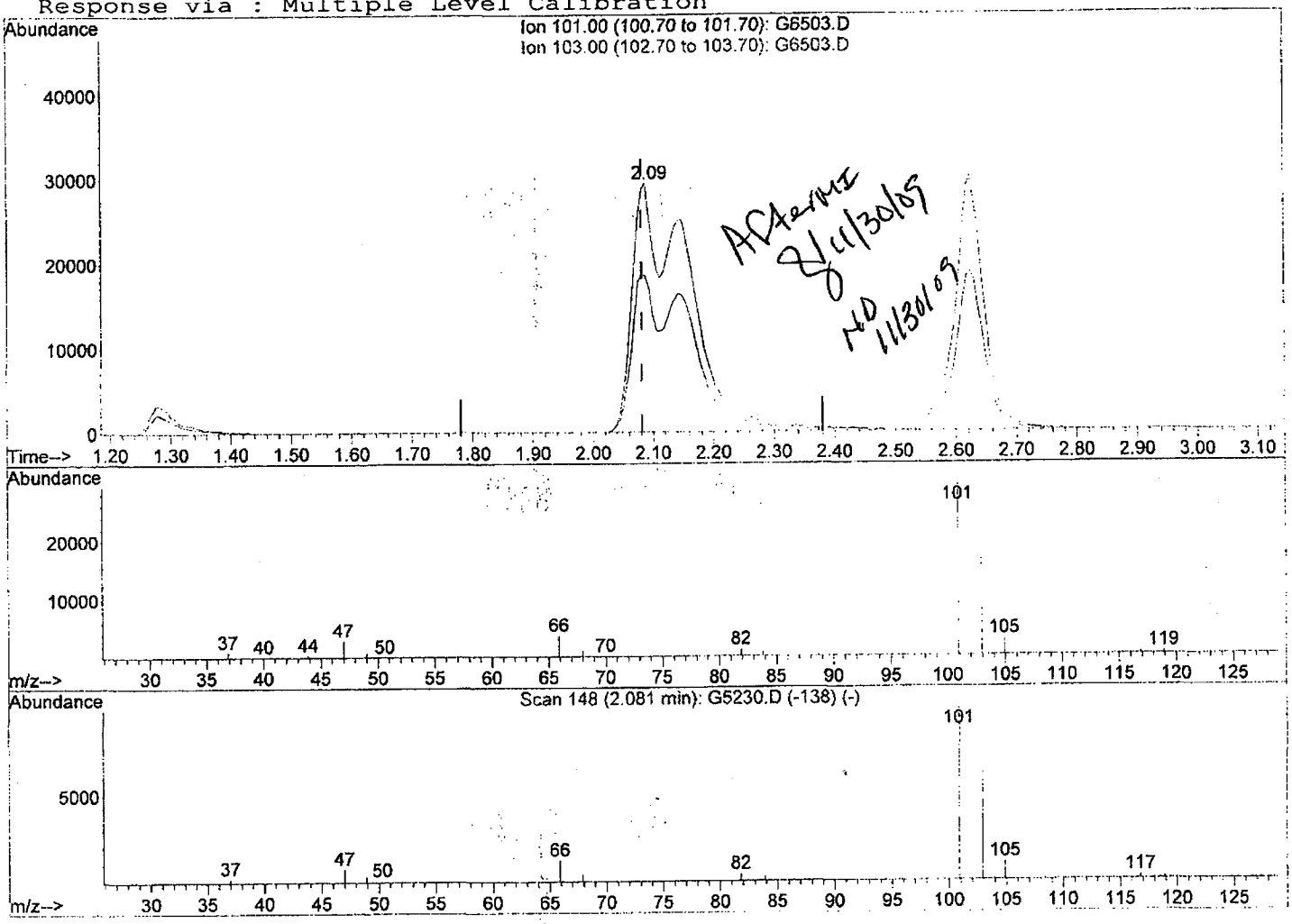
Ion	Exp%	Act%
101.00	100	100
103.00	64.90	63.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File : D:\MSDChem\G\Data\113009\G6503.D
Acq On : 30 Nov 2009 10:30
Sample : RK93007-CCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 30 10:46:50 2009

Vial: 2
Operator: RJ
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Sat Nov 28 12:26:38 2009
Response via : Multiple Level Calibration



TIC: G6503.D

(7) C275 Trichlorofluoromethane (T)

2.09min (+0.006) 27.47ug/L m

response 188861

Ion	Exp%	Act%
101.00	100	100
103.00	64.90	63.00
0.00	0.00	0.00
0.00	0.00	0.00

Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973S	Calibration:	R9K2009
Lab File ID:	S1099.D	Calibration Date:	11/23/09 15:15
Sequence:	RK92405	Injection Date:	11/24/09
Lab Sample ID:	RK92405-CCV1	Injection Time:	09:25

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1-Trichloroethane	A	25.0	23.8	0.4278749	0.4076817		-4.7	
1,1,2,2-Tetrachloroethane	A	25.0	25.1	0.5767234	0.5797191	0.3	0.5	
1,1,2-Trichloroethane	A	25.0	24.4	0.3920406	0.382854		-2.3	
1,1,2-Trichlorotrifluoroethane	A	25.0	23.2	0.2722545	0.2520874		-7.4	
1,1-Dichloroethane	A	25.0	24.0	0.5522296	0.5301	0.1	-4.0	
1,1-Dichloroethene	A	25.0	23.4	0.2635364	0.2468375		-6.3	
1,2,4-Trichlorobenzene	A	25.0	23.9	0.6426675	0.6132634		-4.6	
1,2-Dibromo-3-chloropropane	L	25.0	22.4	7.769075E-02	8.591589E-02		-10.2	
1,2-Dibromoethane (EDB)	A	25.0	24.4	0.4694147	0.4578375		-2.5	
1,2-Dichlorobenzene	A	25.0	23.2	1.192377	1.109038		-7.0	
1,2-Dichloroethane	A	25.0	24.4	0.4107698	0.4015423		-2.2	
1,2-Dichloroethane-d4	A	25.0	24.2	0.3549133	0.3431337		-3.3	
1,2-Dichloroethene, Total	A	50.0	47.3	0.3145647	0.2978908		-5.3	
1,2-Dichloropropane	A	25.0	24.1	0.3163503	0.3045086		-3.7	
1,3-Dichlorobenzene	A	25.0	23.3	1.244665	1.158509		-6.9	
1,4-Dichlorobenzene	A	25.0	22.9	1.278434	1.169057		-8.6	
2-Butanone (MEK)	A	125	129	0.1297306	0.1336232		3.0	
2-Hexanone	A	125	130	0.3208118	0.3336363		4.0	
4-Bromofluorobenzene	A	25.0	25.5	0.6695486	0.682036		1.9	
4-Methyl-2-pentanone (MIBK)	A	125	129	0.4673526	0.4834503		3.4	
Acetone	A	125	124	8.619118E-02	8.555731E-02		-0.7	
Benzene	A	25.0	23.8	1.31963	1.254165		-5.0	
Bromodichloromethane	A	25.0	24.7	0.3137959	0.309584		-1.3	
Bromoform	L	25.0	20.5	0.2106086	0.2088005	0.1	-18.1	
Bromomethane	A	25.0	22.2	9.411441E-02	0.0835989		-11.2	
Carbon disulfide	A	25.0	22.2	0.6158171	0.5476959		-11.1	
Carbon Tetrachloride	A	25.0	23.8	0.3489681	0.3325942		-4.7	
Chlorobenzene	A	25.0	22.9	1.601972	1.469111	0.3	-8.3	
Chlorodibromomethane	L	25.0	21.6	0.3786695	0.3727513		-13.4	

Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973S	Calibration:	R9K2009
Lab File ID:	S1099.D	Calibration Date:	11/23/09 15:15
Sequence:	RK92405	Injection Date:	11/24/09
Lab Sample ID:	RK92405-CCV1	Injection Time:	09:25

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Chloroethane	A	25.0	24.1	5.476853E-02	5.276009E-02		-3.7	
Chloroform	A	25.0	23.8	0.5174824	0.4931667		-4.7	
Chloromethane	A	25.0	24.8	0.4128898	0.4100512	0.1	-0.7	
cis-1,2-Dichloroethene	A	25.0	23.9	0.3299457	0.3156387		-4.3	
cis-1,3-Dichloropropene	A	25.0	25.2	0.4107409	0.4140677		0.8	
Cyclohexane	A	25.0	23.6	0.5835273	0.5515803		-5.5	
Dichlorodifluoromethane	A	25.0	23.9	0.329264	0.3150257		-4.3	
Ethylbenzene	A	25.0	23.4	2.905111	2.714042		-6.6	
Isopropylbenzene	A	25.0	23.2	2.837238	2.634139		-7.2	
Methyl Acetate	A	25.0	26.6	0.3264423	0.3471627		6.3	
Methyl tert-Butyl Ether	A	25.0	24.1	0.6794587	0.6544644		-3.7	
Methylcyclohexane	A	25.0	23.3	0.6099532	0.5675616		-6.9	
Methylene Chloride	A	25.0	23.3	0.318954	0.2975769		-6.7	
Styrene	A	25.0	23.8	1.525005	1.450599		-4.9	
Tetrachloroethene	A	25.0	23.1	0.6342514	0.5861491		-7.6	
Toluene	A	25.0	23.3	1.549195	1.444258		-6.8	
Toluene-d8	A	25.0	24.2	2.211717	2.138973		-3.3	
trans-1,2-Dichloroethene	A	25.0	23.4	0.2991837	0.280143		-6.4	
trans-1,3-Dichloropropene	A	25.0	24.7	0.6588786	0.6513454		-1.1	
Trichloroethene	A	25.0	23.5	0.3155176	0.2961965		-6.1	
Trichlorofluoromethane	A	25.0	23.3	0.3685458	0.3431985		-6.9	
Vinyl acetate	A	125	127	0.5102829	0.520144		1.9	
Vinyl chloride	A	25.0	24.2	0.3907991	0.3784824		-3.2	
Xylenes, total	A	75.0	69.8	1.109751	1.03265		-6.9	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Calibration Type Legend:
A: Average RF
L: Linear through Intercept
Q: Quadratic
L0: Linear forced through Zero
L1: 1/x Weighted Linear through Intercept
L2: 1/x2 Weighted Linear through Intercept
L01: 1/x Weighted Linear forced through Zero
L02: 1/x2 Weighted Linear forced through Zero

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112409\S1099.D Vial: 2
Acq On : 24 Nov 2009 9:25 Operator: DHC
Sample : RK92405-CCV1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 24 09:56:31 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 09:07:52 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1079.D (23 Nov 2009 23:36)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	401345	25.00	ug/L	0.00 93.36%
43) CI20	Chlorobenzene-D5	7.19	82	222022	25.00	ug/L	0.00 93.81%
63) CI30	1,4-Dichlorobenzene-	9.05	152	221647	25.00	ug/L	0.00 92.75%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	108413	24.98	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	99.92%	
31) CS15	1,2-Dichloroethane-D	4.69	65	137715	24.17	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	96.68%	
44) CS05	Toluene-D8	6.07	98	474899	24.18	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	96.72%	
62) CS10	p-Bromofluorobenzene	8.12	174	151427	25.47	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	101.88%	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	126434	23.92	ug/L #	100
3) C010	Chloromethane	1.46	50	164572	24.83	ug/L	98
4) C020	Vinyl chloride	1.53	62	151902	24.21	ug/L	87
5) C015	Bromomethane	1.81	94	33552	22.21	ug/L	86
6) C025	Chloroethane	1.88	64	21175	24.08	ug/L	86
7) C275	Trichlorofluorometha	2.09	101	137741	23.28	ug/L	99
8) C045	1,1-Dichloroethene	2.58	96	99067	23.42	ug/L	96
9) C030	Methylene chloride	3.05	84	119431	23.32	ug/L	91
10) C040	Carbon disulfide	2.76	76	219815	22.23	ug/L	100
11) C036	Acrolein	2.56	56	215035	494.40	ug/L	95
12) C038	Acrylonitrile	3.29	53	230081	127.90	ug/L	93
13) C035	Acetone	2.72	43	171690	124.08	ug/L	97
14) C300	Acetonitrile	2.98	41	733754	1005.81	ug/L	99
15) C276	Iodomethane	2.72	142	141472	23.34	ug/L	100
16) C291	1,1,2-Trichloro-1,2,	2.56	101	101174	23.15	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	262666	24.08	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	112434	23.41	ug/L	98
19) C255	Methyl Acetate	2.97	43	139332	26.59	ug/L	97
20) C050	1,1-Dichloroethane	3.60	63	212753	24.00	ug/L	99
21) C125	Vinyl Acetate	3.65	43	1043786	127.42	ug/L	96
22) C051	2,2-Dichloropropane	4.03	77	133235	24.15	ug/L	96
23) C056	cis-1,2-Dichloroethe	4.06	96	126680	23.92	ug/L	98
24) C272	Tetrahydrofuran	4.29	42	175971	124.63	ug/L	91
25) C222	Bromochloromethane	4.25	128	56049	24.27	ug/L	93
27) C060	Chloroform	4.31	83	197930	23.83	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	163621	23.82	ug/L	98
29) C120	Carbon tetrachloride	4.52	117	133485	23.83	ug/L	98
30) C116	1,1-Dichloropropene	4.53	75	160798	23.88	ug/L	99
32) C165	Benzene	4.69	78	503353	23.76	ug/L	100
33) C065	1,2-Dichloroethane	4.74	62	161157	24.44	ug/L	97
34) C110	2-Butanone	4.10	43	268145	128.75	ug/L	96
35) C256	Cyclohexane	4.42	56	221374	23.63	ug/L	100
36) C150	Trichloroethene	5.17	95	118877	23.47	ug/L	94
37) C140	1,2-Dichloropropane	5.36	63	122213	24.06	ug/L	100
38) C278	Dibromomethane	5.47	93	65072	24.78	ug/L	94

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112409\S1099.D Vial: 2
Acq On : 24 Nov 2009 9:25 Operator: DHC
Sample : RK92405-CCV1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 24 09:56:31 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 09:07:52 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112309\S1079.D (23 Nov 2009 23:36)

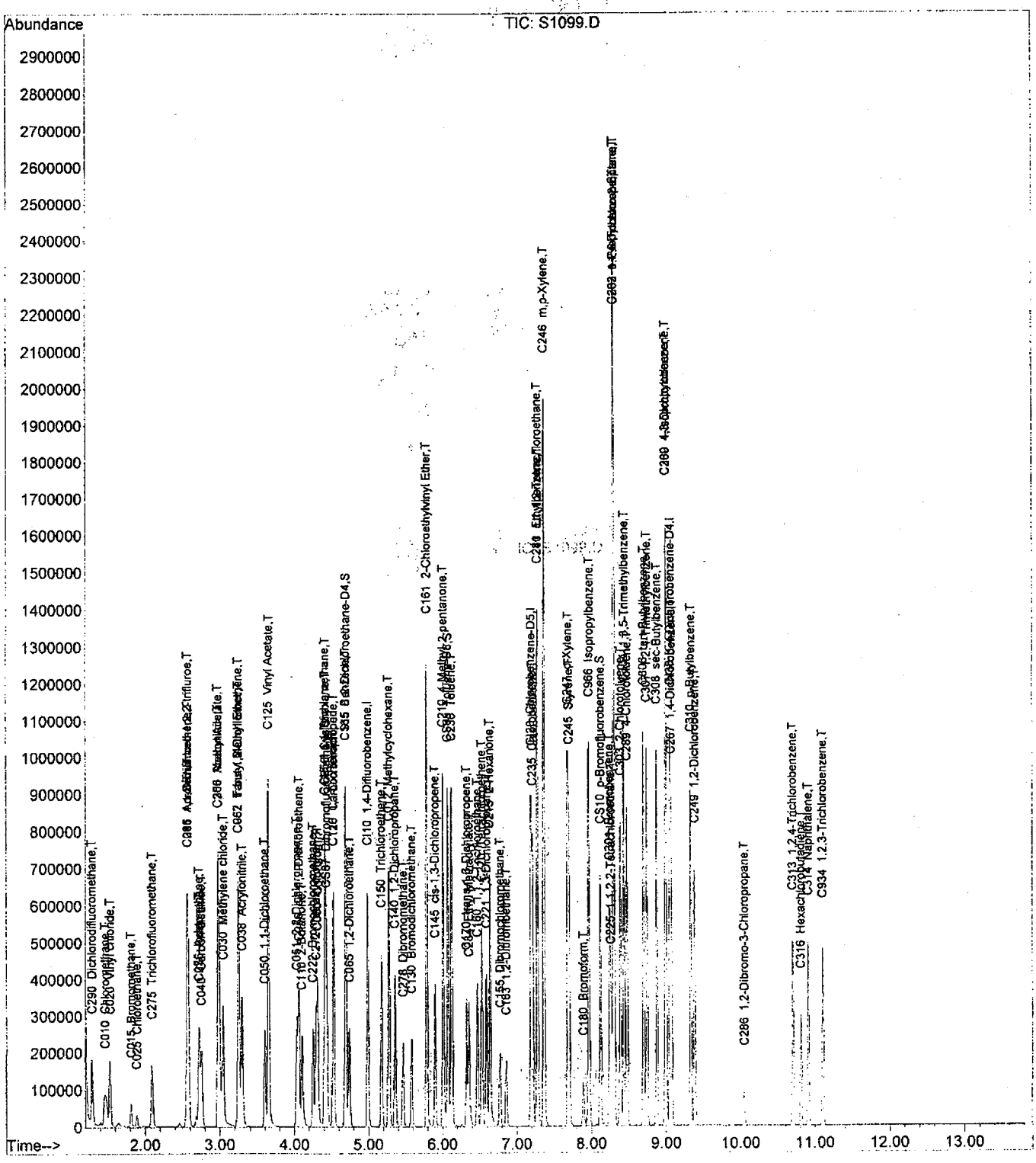
Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	124250	24.66	ug/L		98
40) C161	2-Chloroethylvinyl E	5.78	63	421048	126.42	ug/L		94
41) C012	Methylcyclohexane	5.27	83	227788	23.26	ug/L		99
42) C145	cis-1,3-Dichloroprop	5.90	75	166184	25.20	ug/L		99
45) C230	Toluene	6.12	92	320657	23.31	ug/L		96
46) C170	trans-1,3-Dichloropr	6.32	75	144613	24.71	ug/L		95
47) C284	Ethyl Methacrylate	6.35	69	136266	23.05	ug/L	#	94
48) C160	1,1,2-Trichloroethan	6.47	83	85002	24.41	ug/L		98
49) C210	4-Methyl-2-pentanone	6.00	43	536683	129.31	ug/L		95
50) C220	Tetrachloroethene	6.53	166	130138	23.10	ug/L		99
51) C221	1,3-Dichloropropane	6.59	76	189005	23.92	ug/L		99
52) C155	Dibromochloromethane	6.77	129	82759	21.64	ug/L		100
53) C163	1,2-Dibromoethane	6.86	107	101650	24.38	ug/L		94
54) C215	2-Hexanone	6.63	43	370373	130.00	ug/L		93
55) C235	Chlorobenzene	7.21	112	326175	22.93	ug/L		98
56) C281	1,1,1,2-Tetrachloroe	7.28	131	99078	24.35	ug/L		97
57) C240	Ethylbenzene	7.27	91	602577	23.36	ug/L		100
58) C246	m,p-Xylene	7.36	106	468188	46.65	ug/L		98
59) C247	o-Xylene	7.68	106	219625	23.13	ug/L		95
60) C245	Styrene	7.70	104	322065	23.78	ug/L		99
61) C180	Bromoform	7.89	173	46280	20.48	ug/L		98
64) C966	Isopropylbenzene	7.97	105	583849	23.21	ug/L		97
65) C301	Bromobenzene	8.24	156	134307	23.76	ug/L		90
66) C225	1,1,2,2-Tetrachloroe	8.26	83	128493	25.13	ug/L		99
67) C282	1,2,3-Trichloropropa	8.30	110	43685	25.25	ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	118312	125.71	ug/L	#	56
69) C302	n-Propylbenzene	8.30	91	753150	23.93	ug/L		93
70) C303	2-Chlorotoluene	8.39	126	132569	23.07	ug/L		100
71) C289	4-Chlorotoluene	8.47	126	137755	23.60	ug/L		100
72) C304	1,3,5-Trimethylbenze	8.44	105	491339	23.71	ug/L		96
73) C306	tert-Butylbenzene	8.70	134	107607	23.14	ug/L		91
74) C307	1,2,4-Trimethylbenze	8.74	105	475587	23.66	ug/L		97
75) C308	sec-Butylbenzene	8.87	105	580660	23.31	ug/L		95
76) C260	1,3-Dichlorobenzene	8.99	146	256780	23.27	ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	514282	23.37	ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	259118	22.86	ug/L		98
79) C249	1,2-Dichlorobenzene	9.38	146	245815	23.25	ug/L		98
80) C310	n-Butylbenzene	9.33	91	432937	23.32	ug/L		96
81) C286	1,2-Dibromo-3-Chloro	10.05	75	19043	22.44	ug/L		88
82) C313	1,2,4-Trichlorobenze	10.70	180	135928	23.86	ug/L		97
83) C316	Hexachlorobutadiene	10.81	225	48565	20.82	ug/L		95
84) C314	Naphthalene	10.91	128	331544	27.12	ug/L		99
85) C934	1,2,3-Trichlorobenze	11.10	180	123559	24.01	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112409\S1099.D Vial: 2
Acq On : 24 Nov 2009 9:25 Operator: DHC
Sample : RK92405-CCV1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 24 09:56:31 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 09:07:52 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973S	Calibration:	R9K2009
Lab File ID:	S1129.D	Calibration Date:	11/23/09 15:15
Sequence:	RK92506	Injection Date:	11/25/09
Lab Sample ID:	RK92506-CCV1	Injection Time:	09:50

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1-Trichloroethane	A	25.0	24.8	0.4278749	0.4237336		-1.0	
1,1,2,2-Tetrachloroethane	A	25.0	23.8	0.5767234	0.5488851	0.3	-4.8	
1,1,2-Trichloroethane	A	25.0	24.0	0.3920406	0.375713		-4.2	
1,1,2-Trichlorotrifluoroethane	A	25.0	22.9	0.2722545	0.2494689		-8.4	
1,1-Dichloroethane	A	25.0	25.0	0.5522296	0.5530458	0.1	0.1	
1,1-Dichloroethene	A	25.0	24.2	0.2635364	0.2547101		-3.3	
1,2,4-Trichlorobenzene	A	25.0	22.6	0.6426675	0.5822897		-9.4	
1,2-Dibromo-3-chloropropane	L	25.0	19.4	7.769075E-02	7.234853E-02		-22.5	
1,2-Dibromoethane (EDB)	A	25.0	23.9	0.4694147	0.4494989		-4.2	
1,2-Dichlorobenzene	A	25.0	23.8	1.192377	1.135725		-4.8	
1,2-Dichloroethane	A	25.0	24.9	0.4107698	0.4085241		-0.5	
1,2-Dichloroethane-d4	A	25.0	23.6	0.3549133	0.3343503		-5.8	
1,2-Dichloroethene, Total	A	50.0	48.6	0.3145647	0.3061266		-2.7	
1,2-Dichloropropane	A	25.0	25.2	0.3163503	0.318556		0.7	
1,3-Dichlorobenzene	A	25.0	23.9	1.244665	1.188697		-4.5	
1,4-Dichlorobenzene	A	25.0	23.6	1.278434	1.208278		-5.5	
2-Butanone (MEK)	A	125	113	0.1297306	0.116934		-9.9	
2-Hexanone	A	125	113	0.3208118	0.2898697		-9.6	
4-Bromofluorobenzene	A	25.0	25.4	0.6695486	0.6815353		1.8	
4-Methyl-2-pentanone (MIBK)	A	125	113	0.4673526	0.4241968		-9.2	
Acetone	A	125	108	8.619118E-02	7.445025E-02		-13.6	
Benzene	A	25.0	24.7	1.31963	1.303141		-1.2	
Bromodichloromethane	A	25.0	26.0	0.3137959	0.3262987		4.0	
Bromoform	L	25.0	17.6	0.2106086	0.2049731	0.1	-29.5	
Bromomethane	A	25.0	21.7	9.411441E-02	8.154176E-02		-13.4	
Carbon disulfide	A	25.0	21.9	0.6158171	0.5402468		-12.3	
Carbon Tetrachloride	A	25.0	24.8	0.3489681	0.3456986		-0.9	
Chlorobenzene	A	25.0	23.5	1.601972	1.50539	0.3	-6.0	
Chlorodibromomethane	L	25.0	22.3	0.3786695	0.3849476		-10.9	

Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis G&M, Inc. - NY9A8463.4
Instrument ID:	HP5973S	Calibration:	R9K2009
Lab File ID:	S1129.D	Calibration Date:	11/23/09 15:15
Sequence:	RK92506	Injection Date:	11/25/09
Lab Sample ID:	RK92506-CCV1	Injection Time:	09:50

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Chloroethane	A	25.0	24.2	5.476853E-02	5.309519E-02		-3.1	
Chloroform	A	25.0	24.8	0.5174824	0.5138156		-0.7	
Chloromethane	A	25.0	25.2	0.4128898	0.4169479	0.1	1.0	
cis-1,2-Dichloroethene	A	25.0	24.6	0.3299457	0.3241288		-1.8	
cis-1,3-Dichloropropene	A	25.0	25.8	0.4107409	0.4244704		3.3	
Cyclohexane	A	25.0	23.4	0.5835273	0.5471008		-6.2	
Dichlorodifluoromethane	A	25.0	23.5	0.329264	0.3098612		-5.9	
Ethylbenzene	A	25.0	24.0	2.905111	2.782724		-4.2	
Isopropylbenzene	A	25.0	23.7	2.837238	2.688968		-5.2	
Methyl Acetate	A	25.0	23.6	0.3264423	0.3085598		-5.5	
Methyl tert-Butyl Ether	A	25.0	23.3	0.6794587	0.6324126		-6.9	
Methylcyclohexane	A	25.0	22.7	0.6099532	0.5541371		-9.2	
Methylene Chloride	A	25.0	24.2	0.318954	0.308061		-3.4	
Styrene	A	25.0	24.6	1.525005	1.499872		-1.6	
Tetrachloroethene	A	25.0	23.6	0.6342514	0.5979727		-5.7	
Toluene	A	25.0	23.8	1.549195	1.476014		-4.7	
Toluene-d8	A	25.0	24.1	2.211717	2.135116		-3.5	
trans-1,2-Dichloroethene	A	25.0	24.1	0.2991837	0.2881243		-3.7	
trans-1,3-Dichloropropene	A	25.0	24.8	0.6588786	0.6538451		-0.8	
Trichloroethene	A	25.0	24.2	0.3155176	0.3053341		-3.2	
Trichlorofluoromethane	A	25.0	26.0	0.3685458	0.3833995		4.0	
Vinyl acetate	A	125	119	0.5102829	0.4868675		-4.6	
Vinyl chloride	A	25.0	24.3	0.3907991	0.3800725		-2.7	
Xylenes, total	A	75.0	72.0	1.109751	1.064753		-4.1	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Calibration Type Legend:
A: Average RF
L: Linear through Intercept
Q: Quadratic
L0: Linear forced through Zero
L1: 1/x Weighted Linear through Intercept
L2: 1/x2 Weighted Linear through Intercept
L01: 1/x Weighted Linear forced through Zero
L02: 1/x2 Weighted Linear forced through Zero

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1129.D Vial: 3
Acq On : 25 Nov 2009 9:50 Operator: DHC
Sample : RK92506-CCV1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 10:04:47 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 15:43:31 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	394951	25.00	ug/L	0.00 98.41%
43) CI20	Chlorobenzene-D5	7.19	82	219500	25.00	ug/L	0.00 98.86%
63) CI30	1,4-Dichlorobenzene-	9.06	152	219341	25.00	ug/L	0.00 98.96%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	109332	25.60	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	102.40%	
31) CS15	1,2-Dichloroethane-D	4.69	65	132052	23.55	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	94.20%	
44) CS05	Toluene-D8	6.07	98	468658	24.13	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	96.52%	
62) CS10	p-Bromofluorobenzene	8.12	174	149597	25.45	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	101.80%	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	122380	23.53	ug/L #	100
3) C010	Chloromethane	1.46	50	164674	25.25	ug/L	98
4) C020	Vinyl chloride	1.53	62	150110	24.31	ug/L	87
5) C015	Bromomethane	1.80	94	32205	21.66	ug/L	87
6) C025	Chloroethane	1.89	64	20970	24.24	ug/L	91
7) C275	Trichlorofluorometha	2.10	101	151424	26.01	ug/L	99
8) C045	1,1-Dichloroethene	2.58	96	100598	24.16	ug/L	96
9) C030	Methylene chloride	3.04	84	121669	24.15	ug/L	92
10) C040	Carbon disulfide	2.76	76	213371	21.93	ug/L	100
11) C036	Acrolein	2.56	56	184101	430.13	ug/L	96
12) C038	Acrylonitrile	3.29	53	200485	113.25	ug/L	93
13) C035	Acetone	2.72	43	147021	107.97	ug/L	95
14) C300	Acetonitrile	2.98	41	631317	879.41	ug/L	99
15) C276	Iodomethane	2.73	142	137567	23.06	ug/L	99
16) C291	1,1,2-Trichloro-1,2,	2.56	101	98528	22.91	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	249772	23.27	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	113795	24.08	ug/L	99
19) C255	Methyl Acetate	2.97	43	121866	23.63	ug/L	97
20) C050	1,1-Dichloroethane	3.60	63	218426	25.04	ug/L	99
21) C125	Vinyl Acetate	3.65	43	961444	119.26	ug/L	97
22) C051	2,2-Dichloropropane	4.04	77	133066	24.51	ug/L	98
23) C056	cis-1,2-Dichloroethe	4.06	96	128015	24.56	ug/L	97
24) C272	Tetrahydrofuran	4.29	42	150434	108.27	ug/L	88
25) C222	Bromochloromethane	4.26	128	56939	25.05	ug/L	98
27) C060	Chloroform	4.32	83	202932	24.82	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	167354	24.76	ug/L	97
29) C120	Carbon tetrachloride	4.52	117	136534	24.77	ug/L	98
30) C116	1,1-Dichloropropene	4.54	75	162037	24.45	ug/L	97
32) C165	Benzene	4.69	78	514677	24.69	ug/L	100
33) C065	1,2-Dichloroethane	4.74	62	161347	24.86	ug/L	97
34) C110	2-Butanone	4.10	43	230916	112.67	ug/L	93
35) C256	Cyclohexane	4.42	56	216078	23.44	ug/L	99
36) C150	Trichloroethene	5.17	95	120592	24.19	ug/L	93
37) C140	1,2-Dichloropropane	5.36	63	125814	25.17	ug/L	100
38) C278	Dibromomethane	5.47	93	64244	24.86	ug/L	93

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1129.D
Acq On : 25 Nov 2009 9:50
Sample : RK92506-CCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 25 10:04:47 2009

Vial: 3
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 15:43:31 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	128872	26.00	ug/L		97
40) C161	2-Chloroethylvinyl E	5.78	63	386640	117.97	ug/L		94
41) C012	Methylcyclohexane	5.28	83	218857	22.71	ug/L		99
42) C145	cis-1,3-Dichloroprop	5.90	75	167645	25.84	ug/L		99
45) C230	Toluene	6.12	92	323985	23.82	ug/L		94
46) C170	trans-1,3-Dichloropr	6.32	75	143519	24.81	ug/L		96
47) C284	Ethyl Methacrylate	6.35	69	125814	21.62	ug/L	#	93
48) C160	1,1,2-Trichloroethan	6.47	83	82469	23.96	ug/L		98
49) C210	4-Methyl-2-pentanone	6.01	43	465556	113.46	ug/L		94
50) C220	Tetrachloroethene	6.53	166	131255	23.57	ug/L		98
51) C221	1,3-Dichloropropane	6.59	76	186943	23.93	ug/L		98
52) C155	Dibromochloromethane	6.77	129	84496	22.28	ug/L		99
53) C163	1,2-Dibromoethane	6.86	107	98665	23.94	ug/L		96
54) C215	2-Hexanone	6.63	43	318132	112.94	ug/L		93
55) C235	Chlorobenzene	7.21	112	330433	23.49	ug/L		97
56) C281	1,1,1,2-Tetrachloroe	7.28	131	101400	25.21	ug/L		97
57) C240	Ethylbenzene	7.27	91	610808	23.95	ug/L		98
58) C246	m,p-Xylene	7.36	106	477362	48.11	ug/L		96
59) C247	o-Xylene	7.68	106	223778	23.84	ug/L		93
60) C245	Styrene	7.70	104	329222	24.59	ug/L		96
61) C180	Bromoform	7.89	173	44959	17.62	ug/L		99
64) C966	Isopropylbenzene	7.97	105	589801	23.69	ug/L		96
65) C301	Bromobenzene	8.24	156	135931	24.30	ug/L		89
66) C225	1,1,2,2-Tetrachloroe	8.26	83	120393	23.79	ug/L		99
67) C282	1,2,3-Trichloropropa	8.29	110	39556	23.10	ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	110187	118.30	ug/L	#	52
69) C302	n-Propylbenzene	8.29	91	746473	23.97	ug/L		93
70) C303	2-Chlorotoluene	8.39	126	134730	23.69	ug/L		100
71) C289	4-Chlorotoluene	8.48	126	137617	23.83	ug/L		100
72) C304	1,3,5-Trimethylbenze	8.43	105	486629	23.73	ug/L		96
73) C306	tert-Butylbenzene	8.70	134	105767	22.98	ug/L	#	89
74) C307	1,2,4-Trimethylbenze	8.75	105	476981	23.98	ug/L		99
75) C308	sec-Butylbenzene	8.87	105	567725	23.03	ug/L		94
76) C260	1,3-Dichlorobenzene	9.00	146	260730	23.88	ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	503452	23.12	ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	265025	23.63	ug/L		99
79) C249	1,2-Dichlorobenzene	9.38	146	249111	23.81	ug/L		97
80) C310	n-Butylbenzene	9.33	91	414186	22.54	ug/L		95
81) C286	1,2-Dibromo-3-Chloro	10.05	75	15869	19.38	ug/L		91
82) C313	1,2,4-Trichlorobenze	10.70	180	127720	22.65	ug/L		96
83) C316	Hexachlorobutadiene	10.81	225	46258	20.04	ug/L		100
84) C314	Naphthalene	10.90	128	266287	22.01	ug/L		98
85) C934	1,2,3-Trichlorobenze	11.11	180	112820	22.15	ug/L		99

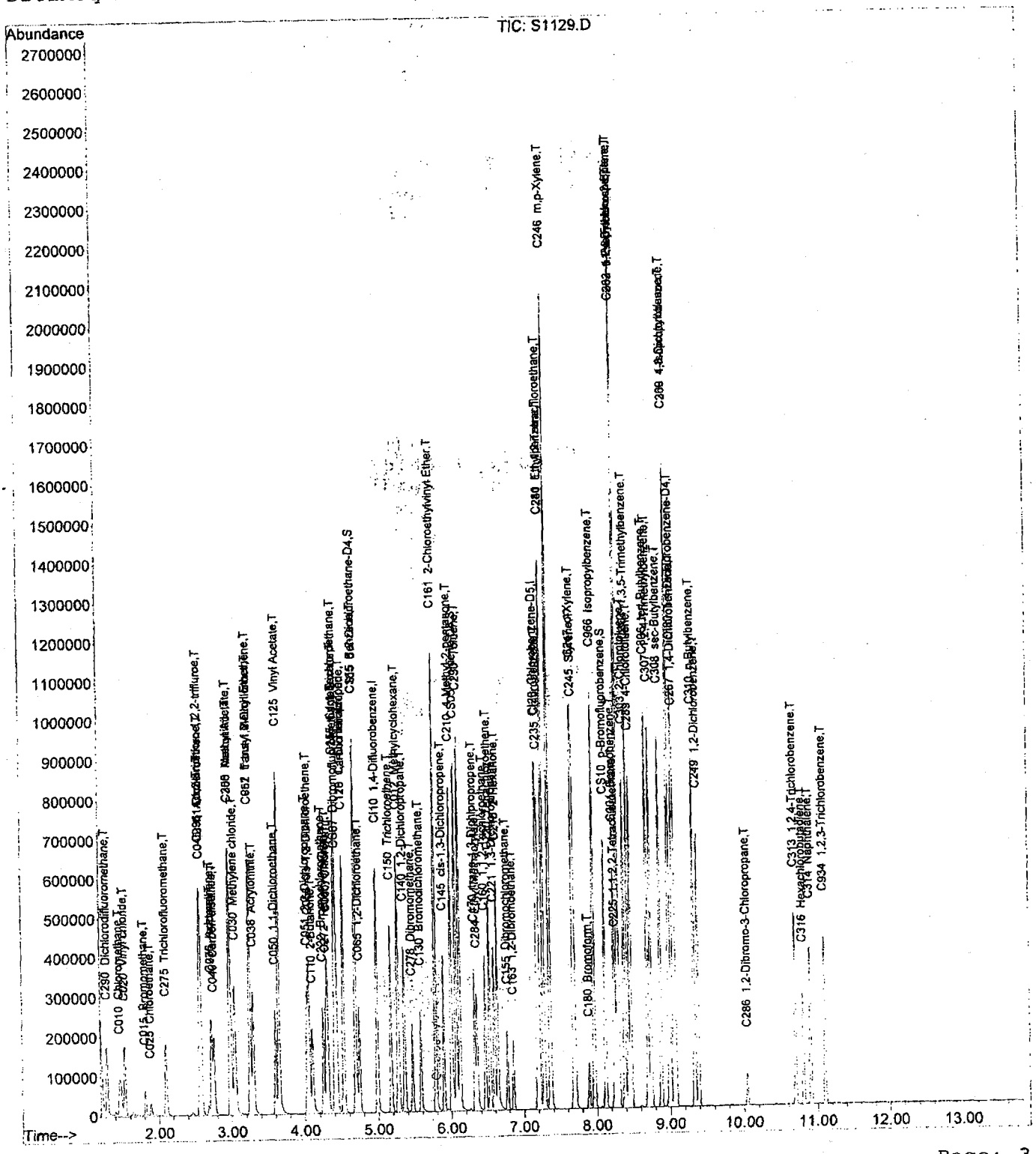
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1129.D
Acq On : 25 Nov 2009 9:50
Sample : RK92506-CCV1
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 25 10:04:47 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 15:43:31 2009
Response via : Initial Calibration
DataAcq Meth : VOA

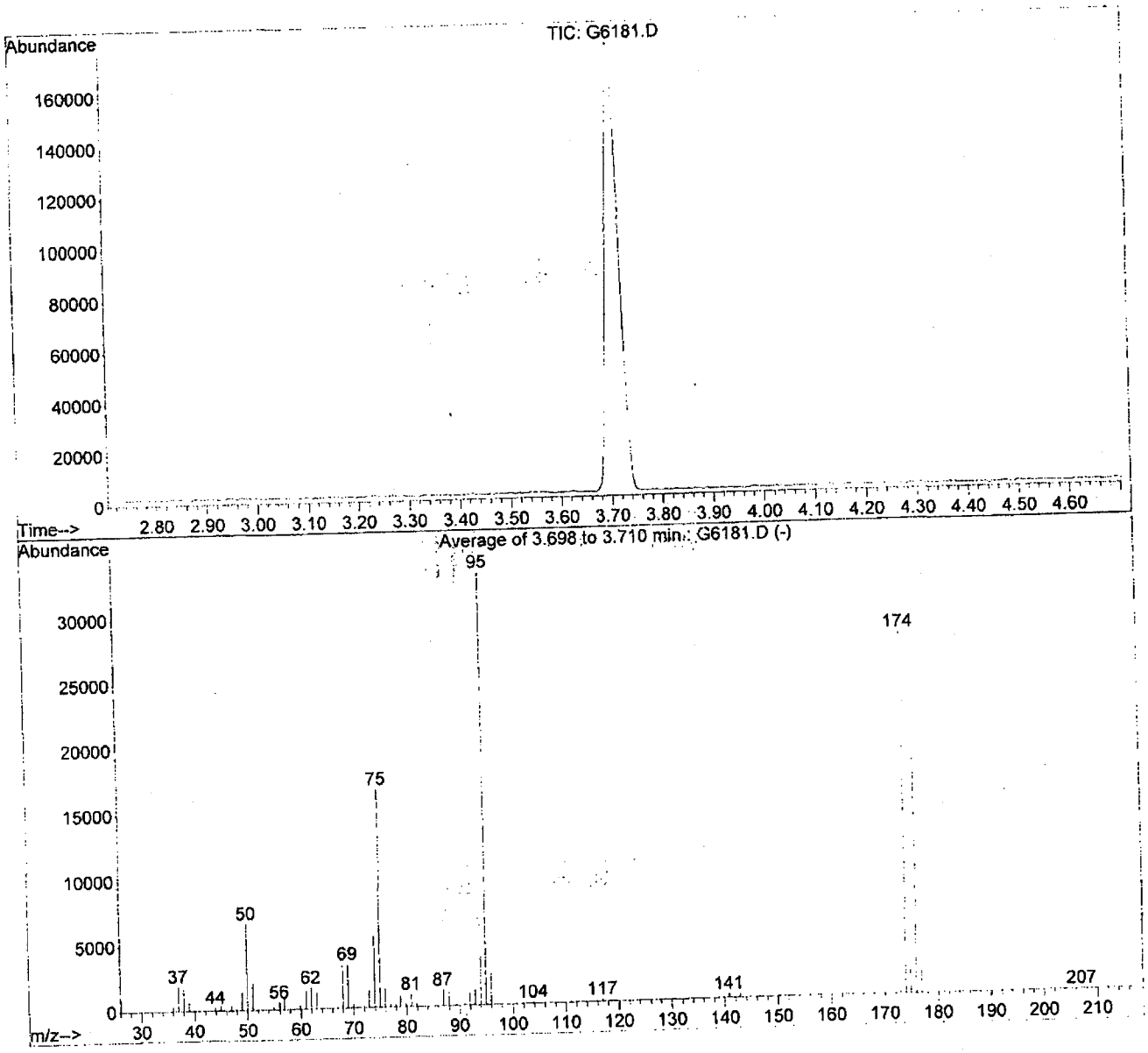


BFB Tune Evaluation

Data File : D:\MSDCHEM\G\DATA\111809\G6181.D
Acq On : 18 Nov 2009 12:28
Sample : RK91820-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 1
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER



Peak Apex is scan: 376 (3.70 min)
Average of 3 scans: 375,376,377 minus background scan 356 (3.58 min)

Target Mass	Rel. to Mass	Lower Limit, %	Upper Limit, %	Rel. Abn, %	Raw Abn	Result Pass/Fail
50	95	15	40	20.0	6640	PASS
75	95	30	60	50.4	16678	PASS
95	95	100	100	100.0	33122	PASS
96	95	5	9	7.2	2399	PASS
173	174	0	2	0.5	130	PASS
174	95	50	100	83.6	27680	PASS
175	174	5	9	6.7	1858	PASS
176	174	95	101	95.3	26368	PASS
177	176	5	9	6.6	1740	PASS

Average of 3.698 to 3.710 min.: G6181.D
RK91820-TUN1
Modified:subtracted

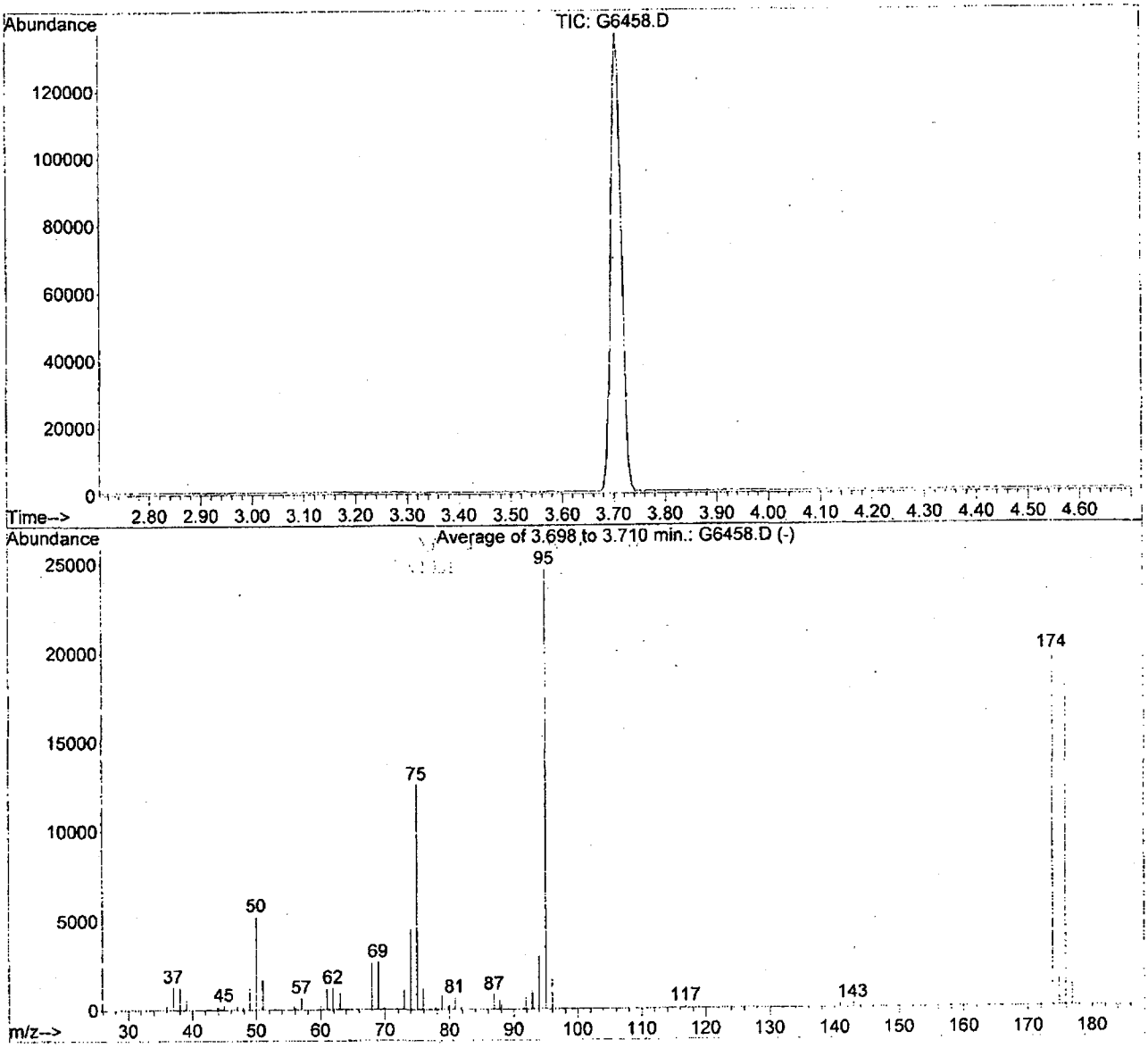
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	336	56.00	571	75.00	16678	92.95	1435
37.00	1886	56.95	883	76.00	1437	94.00	3826
38.00	1713	59.90	281	76.95	214	95.00	33122
38.95	620	61.00	1534	77.95	205	95.95	2399
43.95	237	61.95	1636	78.85	862	116.95	203
45.00	338	63.00	1249	79.90	249	140.85	320
46.95	420	67.95	3262	80.85	957	142.85	316
49.00	1497	68.95	3362	81.85	235	173.90	27680
50.00	6640	69.95	359	86.90	1220	174.85	1858
51.00	2116	72.95	1337	87.90	1154	175.90	26368
54.95	218	74.00	5522	91.95	936	176.90	1740

BFB Tune Evaluation

Data File : D:\MSDChem\G\Data\112709\G6458.D
Acq On : 27 Nov 2009 9:48
Sample : RK92704-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 1
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER



Peak Apex is scan: 376 (3.70 min)
Average of 3 scans: 375,376,377 minus background scan 356 (3.58 min)

Target Mass	Rel. to Mass	Lower Limit,%	Upper Limit,%	Rel. Abn,%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4	5267	PASS
75	95	30	60	51.0	12590	PASS
95	95	100	100	100.0	24669	PASS
96	95	5	9	6.9	1713	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	79.9	19721	PASS
175	174	5	9	7.4	1467	PASS
176	174	95	101	95.9	18922	PASS
177	176	5	9	6.6	1248	PASS

Average of 3.698 to 3.710 min.: G6458.D
RK92704-TUN1
Modified:subtracted

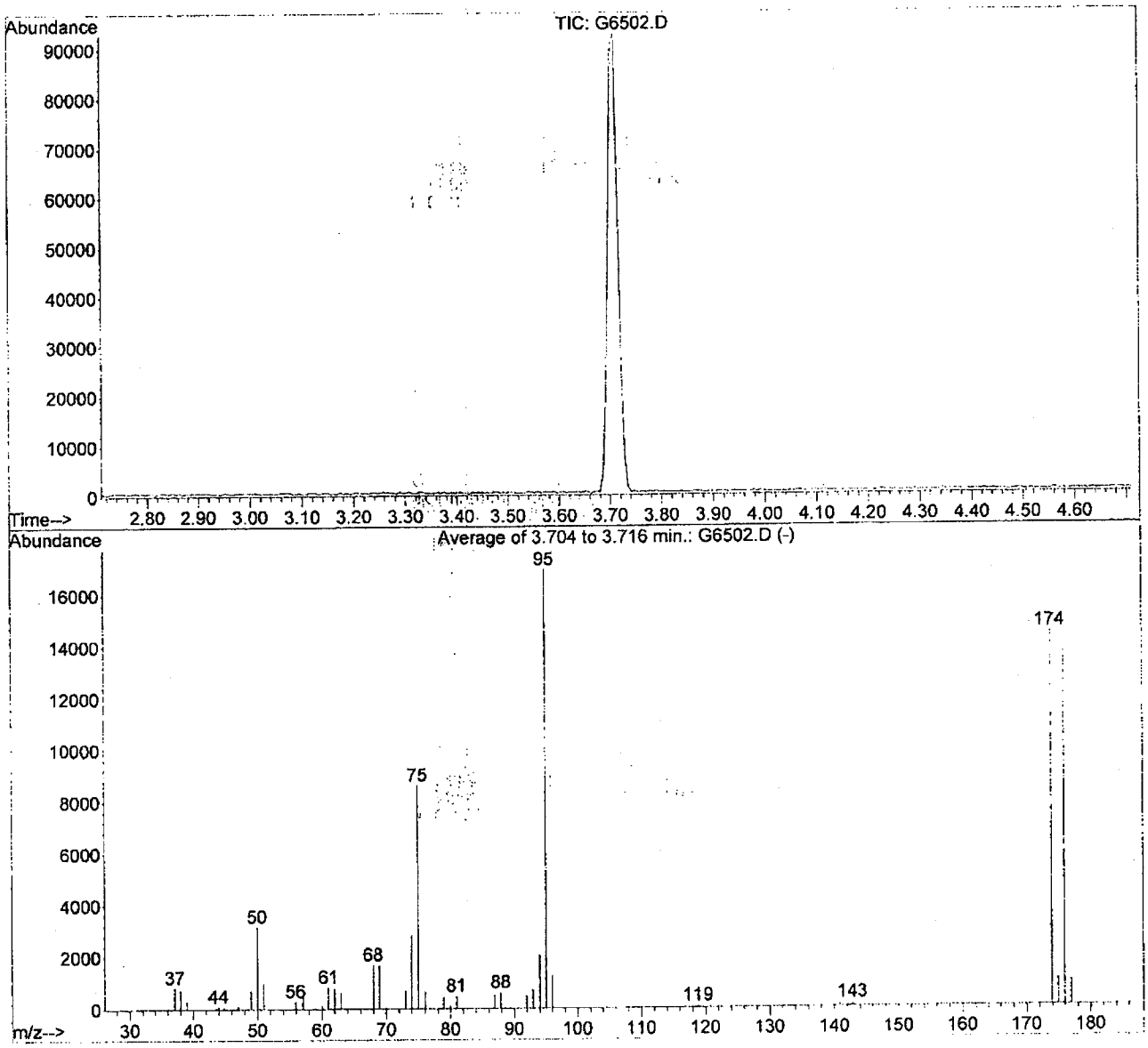
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	265	57.00	688	77.85	125	95.00	24669
37.00	1302	59.95	216	78.85	749	95.95	1713
38.00	1246	61.00	1192	79.95	200	116.85	124
39.00	531	61.95	1222	80.85	696	140.85	208
44.00	157	63.05	918	81.90	169	142.85	235
44.95	254	68.00	2581	86.95	857	173.90	19721
47.05	215	69.00	2674	87.80	501	174.90	1467
48.95	1205	72.95	1130	88.00	298	175.90	18922
50.00	5267	74.00	4500	91.95	696	176.90	1248
51.00	1648	75.00	12590	92.90	1050		
55.90	258	75.95	1170	93.95	2965		

BFB Tune Evaluation

Data File : D:\MSDChem\G\Data\113009\G6502.D
Acq On : 30 Nov 2009 10:00
Sample : RK93007-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 1
Operator: RJ
Inst : HP5973G
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER



Peak Apex is scan: 377 (3.71 min)
Average of 3 scans: 376,377,378 minus background scan 357 (3.59 min)

Target Mass	Rel. to Mass	Lower Limit, %	Upper Limit, %	Rel. Abn, %	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	3168	PASS
75	95	30	60	50.8	8621	PASS
95	95	100	100	100.0	16955	PASS
96	95	5	9	7.2	1227	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	85.1	14429	PASS
175	174	5	9	7.3	1051	PASS
176	174	95	101	96.4	13913	PASS
177	176	5	9	7.1	982	PASS

G6502.D R9K1805-SIXPT.M Mon Nov 30 10:16:30 2009 HP5973S

Average of 3.704 to 3.716 min.: G6502.D
RK93007-TUN1
Modified:subtracted

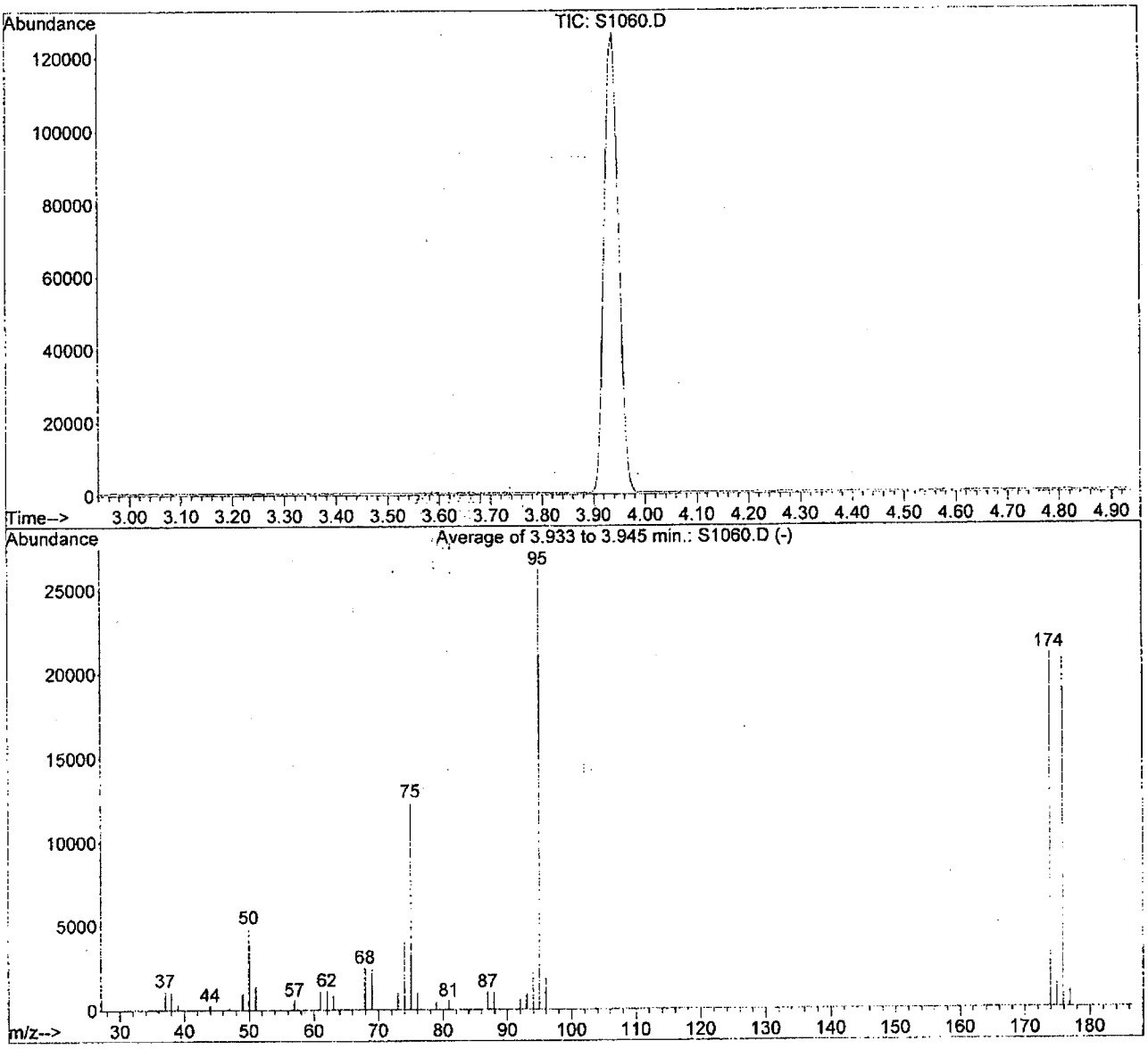
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	830	61.00	827	80.95	477	174.90	1051
38.00	755	62.00	795	86.95	518	175.90	13913
39.00	321	62.95	610	87.90	609	176.95	982
43.95	103	68.00	1678	91.95	480		
47.00	131	68.95	1663	92.95	710		
49.00	727	73.00	715	94.00	2046		
50.00	3168	74.00	2818	95.00	16955		
51.00	1001	75.00	8621	96.00	1227		
55.95	294	76.05	682	140.85	110		
57.05	455	78.90	447	142.85	132		
60.05	135	79.95	108	173.90	14429		

BFB Tune Evaluation

Data File : D:\MSDChem\S\Data\112309\S1060.D
Acq On : 23 Nov 2009 14:27
Sample : RK91904-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 1
Operator: RJ
Inst : HP5973S
Multiplr: 1.00

Method : D:\MSDCHEM\S\MET...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER



Peak Apex is scan: 388 (3.94 min)
Average of 3 scans: 387,388,389 minus background scan 368 (3.82 min)

Target Mass	Rel. to Mass	Lower Limit,%	Upper Limit,%	Rel. Abn,%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	4882	PASS
75	95	30	60	47.3	12410	PASS
95	95	100	100	100.0	26226	PASS
96	95	5	9	7.0	1837	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	80.4	21088	PASS
175	174	5	9	7.0	1480	PASS
176	174	95	101	98.4	20757	PASS
177	176	5	9	6.3	1308	PASS

Average of 3.933 to 3.945 min.: S1060.D
RK91904-TUN1
Modified:subtracted

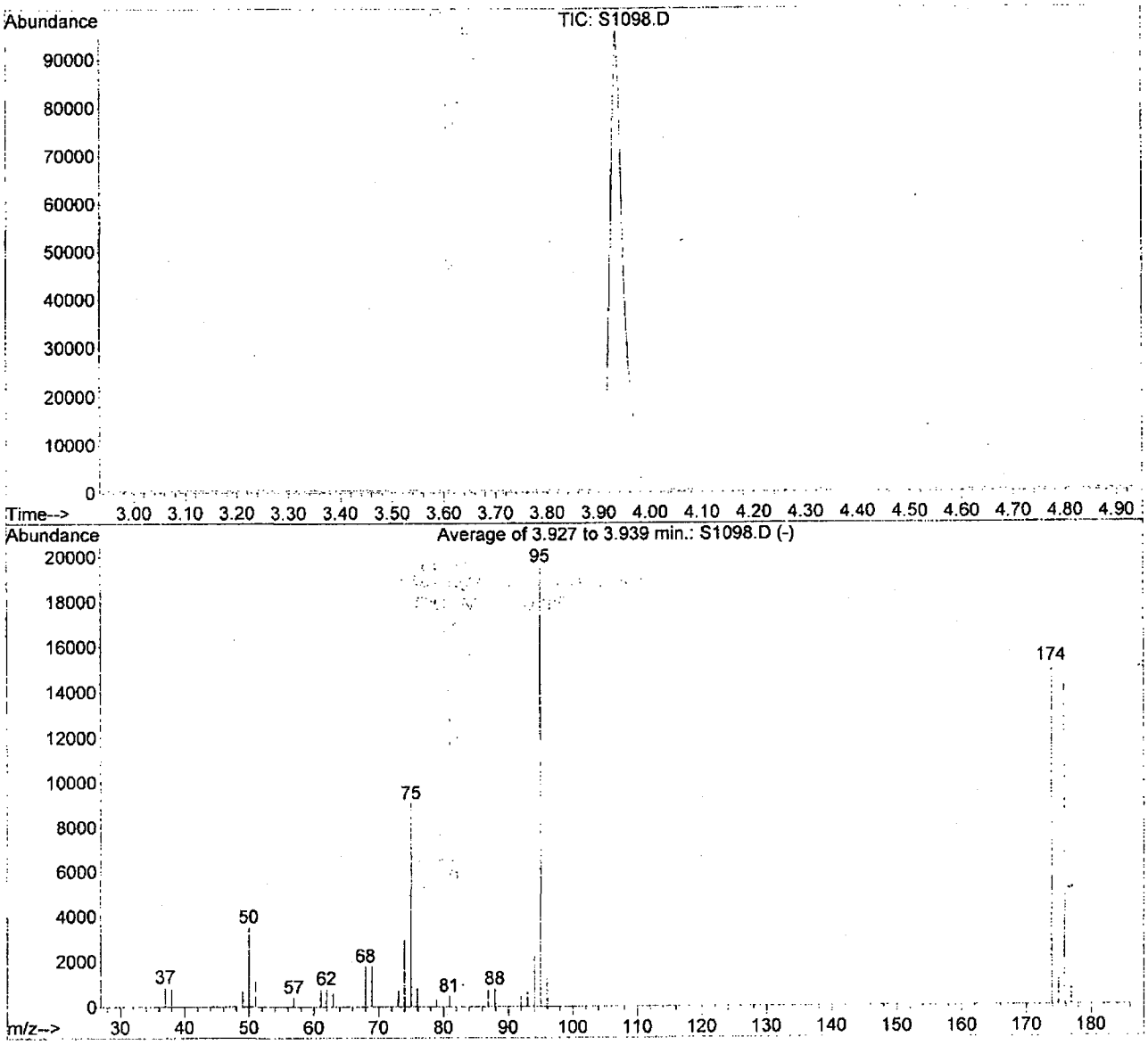
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	1132	63.00	816	92.00	632		
38.00	993	67.95	2502	92.95	924		
39.00	321	69.00	2404	94.00	2853		
44.00	274	73.00	1037	95.00	26226		
47.00	132	74.00	4195	96.00	1837		
49.00	956	75.00	12410	173.90	21088		
50.00	4882	76.00	1021	174.90	1480		
51.00	1407	78.90	504	175.90	20757		
57.00	580	80.90	533	176.90	1308		
60.95	1107	86.95	1059				
62.00	1146	87.90	1009				

BFB Tune Evaluation

Data File : D:\MSDChem\S\Data\112409\S1098.D
Acq On : 24 Nov 2009 9:05
Sample : RK92405-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 1
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Method : D:\MSDCHEM\S\MET...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER



Peak Apex is scan: 387 (3.93 min)
Average of 3 scans: 386,387,388 minus background scan 367 (3.81 min)

Target Mass	Rel. to Mass	Lower Limit,%	Upper Limit,%	Rel. Abn,%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	3521	PASS
75	95	30	60	46.4	9067	PASS
95	95	100	100	100.0	19562	PASS
96	95	5	9	6.4	1256	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	76.9	15041	PASS
175	174	5	9	7.5	1130	PASS
176	174	95	101	96.5	14510	PASS
177	176	5	9	7.1	1024	PASS

S1098.D R9K2009-SIXPT.M Tue Nov 24 09:20:08 2009 HP5973S

Average of 3.927 to 3.939 min.: S1098.D
RK92405-TUN1
Modified:subtracted

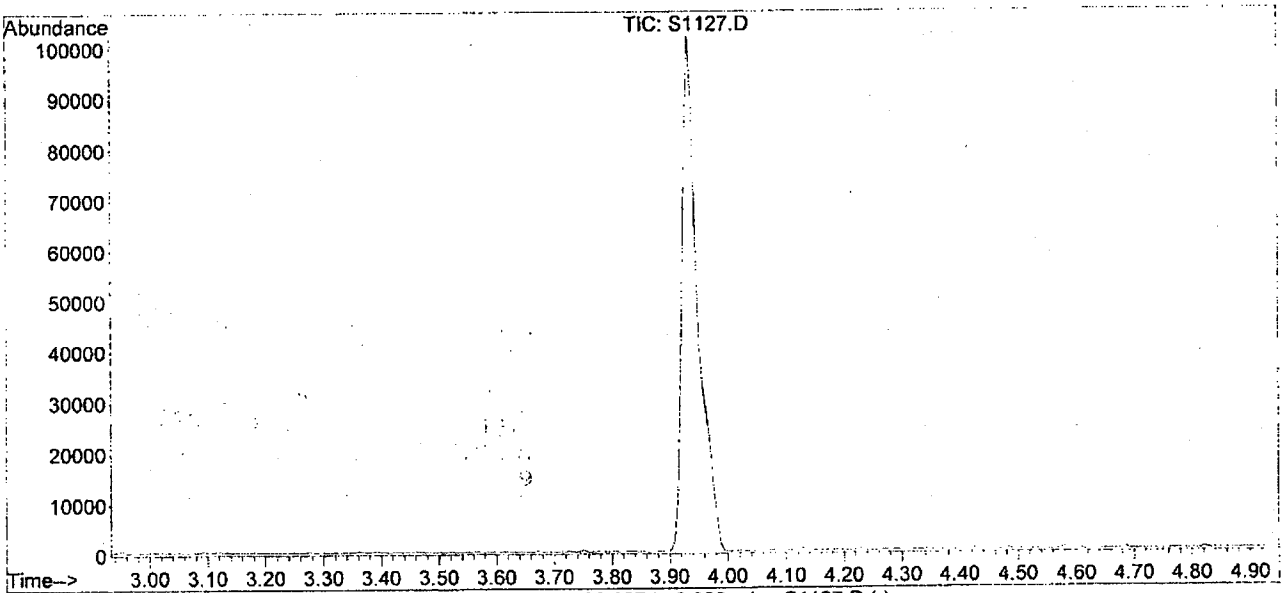
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	860	68.95	1774	94.00	2198		
38.00	800	73.00	722	95.00	19562		
47.00	118	74.00	2957	96.00	1256		
49.00	697	75.00	9067	173.90	15041		
50.00	3521	75.95	805	174.90	1130		
51.00	1120	78.90	300	175.90	14510		
56.95	426	80.90	470	176.90	1024		
61.00	761	86.95	721				
61.95	786	87.95	784				
62.95	578	91.95	456				
68.00	1785	92.95	653				

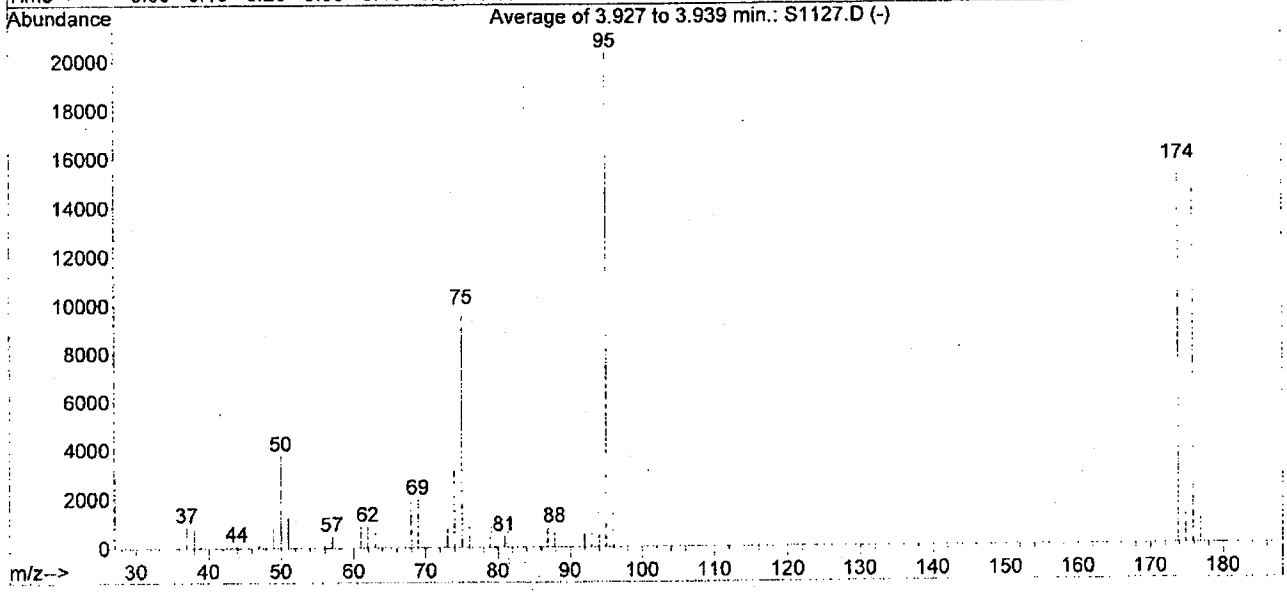
BFB Tune Evaluation

Data File : D:\MSDChem\S\Data\112509\S1127.D
Acq On : 25 Nov 2009 9:06
Sample : RK92506-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 1
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Method : D:\MSDCHEM\G\MET...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER





Peak Apex is scan: 387 (3.93 min)
Average of 3 scans: 386,387,388 minus background scan 367 (3.81 min)

Target Mass	Rel. to Mass	Lower Limit,%	Upper Limit,%	Rel. Abn,%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	3760	PASS
75	95	30	60	48.4	9831	PASS
95	95	100	100	100.0	20322	PASS
96	95	5	9	6.6	1351	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	76.4	15535	PASS
175	174	5	9	7.4	1154	PASS
176	174	95	101	96.1	14932	PASS
177	176	5	9	6.9	1035	PASS

S1127.D R9K1805-SIXPT.M Wed Nov 25 09:17:51 2009 HP5973S

Average of 3.927 to 3.939 min.: S1127.D
RK92506-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	874	63.00	634	91.95	626		
38.00	750	68.00	1862	92.95	768		
39.00	140	68.95	1961	93.95	2392		
47.00	143	73.00	801	95.00	20322		
49.00	784	74.00	3159	96.00	1351		
50.00	3760	75.00	9831	173.90	15535		
51.00	1229	76.00	851	174.90	1154		
56.00	119	78.85	434	175.90	14932		
57.00	477	80.90	460	176.90	1035		
60.95	845	86.90	788				
61.95	876	87.85	801				

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	9K24017-BLK1	File ID:	S1103.D
Sampled:		Prepared:	11/24/09 08:00	Analyzed:	11/24/09 11:24
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	2.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: 9K24017-BLK1 File ID: S1103.D

Sampled: Prepared: 11/24/09 08:00 Analyzed: 11/24/09 11:24

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.2	97	66 - 137	
4-Bromofluorobenzene	25.0	25.0	100	73 - 120	
Toluene-d8	25.0	23.8	95	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	196320	9.05	221647	9.05	
1,4-Difluorobenzene	389490	4.99	401345	4.99	
Chlorobenzene-d5	208848	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : H:\GCMS_VOA\S\112409\S1103.D
Acq On : 24 Nov 2009 11:24
Sample : 9K24017-BLK1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 24 17:14:48 2009

Vial: 6
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 15:43:31 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

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Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	389490	25.00	ug/L	0.00 97.05%
43) CI20	Chlorobenzene-D5	7.19	82	208848	25.00	ug/L	0.00 94.07%
63) CI30	1,4-Dichlorobenzene-	9.05	152	196320	25.00	ug/L	0.00 88.57%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	98568	23.40	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	93.60%		
31) CS15	1,2-Dichloroethane-D	4.69	65	133542	24.15	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	96.60%		
44) CS05	Toluene-D8	6.07	98	440664	23.85	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	95.40%		
62) CS10	p-Bromofluorobenzene	8.12	174	139638	24.96	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	99.84%		

Target Compounds					Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.
3) C010	Chloromethane	0.00	50	0	N.D.
4) C020	Vinyl chloride	0.00	62	0	N.D.
5) C015	Bromomethane	0.00	94	0	N.D.
6) C025	Chloroethane	0.00	64	0	N.D.
7) C275	Trichlorofluoromet	0.00	101	0	N.D.
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.
9) C030	Methylene chloride	0.00	84	0	N.D.
10) C040	Carbon disulfide	2.77	76	932	N.D.
11) C036	Acrolein	0.00	56	0	N.D.
12) C038	Acrylonitrile	0.00	53	0	N.D.
13) C035	Acetone	0.00	43	0	N.D.
14) C300	Acetonitrile	0.00	41	0	N.D.
15) C276	Iodomethane	0.00	142	0	N.D.
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.
19) C255	Methyl Acetate	0.00	43	0	N.D.
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.
21) C125	Vinyl Acetate	0.00	43	0	N.D.
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.
24) C272	Tetrahydrofuran	4.33	42	619	N.D.
25) C222	Bromochloromethane	0.00	128	0	N.D.
27) C060	Chloroform	0.00	83	0	N.D.
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.
29) C120	Carbon tetrachlori	0.00	117	0	N.D.
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.
32) C165	Benzene	0.00	78	0	N.D.
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.
34) C110	2-Butanone	0.00	43	0	N.D.
35) C256	Cyclohexane	0.00	56	0	N.D.
36) C150	Trichloroethene	0.00	95	0	N.D.
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.
38) C278	Dibromomethane	0.00	93	0	N.D.

11/25/09

Quantitation Report TA Buffalo (Not Reviewed)

Data File : H:\GCMS_VOA\S\112409\S1103.D Vial: 6
Acq On : 24 Nov 2009 11:24 Operator: DHC
Sample : 9K24017-BLK1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 24 17:14:48 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 15:43:31 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.12	92	156	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1682	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.19	91	522	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	7.70	104	139	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.30	91	491	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	8.75	105	133	N.D.	
75) C308	sec-Butylbenzene	8.75	105	133	N.D.	
76) C260	1,3-Dichlorobenzen	9.07	146	889	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	9.07	146	889	N.D.	
79) C249	1,2-Dichlorobenzen	9.38	146	172	N.D.	
80) C310	n-Butylbenzene	9.33	91	634	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	10.70	180	359	N.D.	
83) C316	Hexachlorobutadien	10.81	225	138	N.D.	
84) C314	Naphthalene	10.90	128	819	N.D.	
85) C934	1,2,3-Trichloroben	11.11	180	335	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

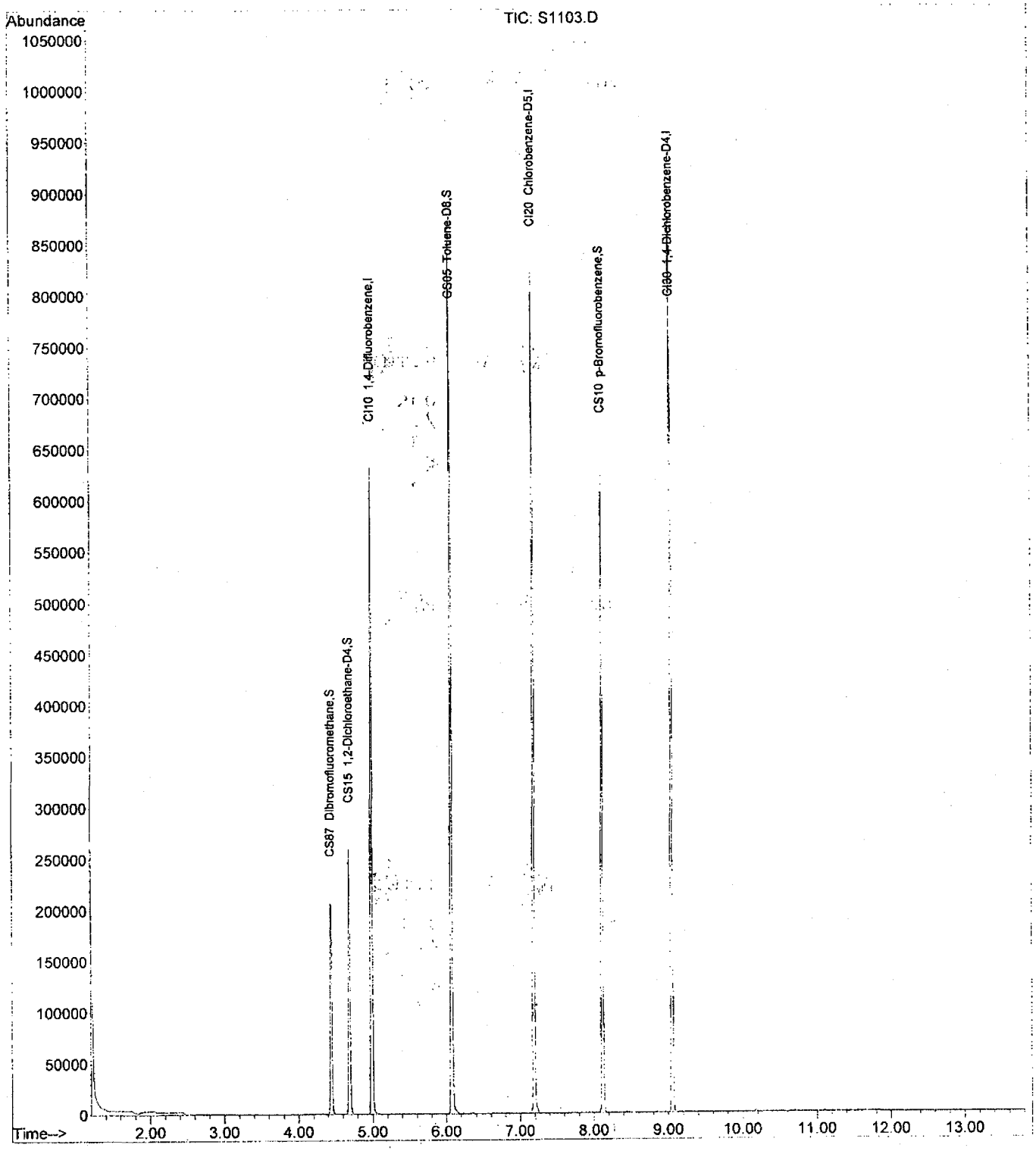
11/24/09

Quantitation Report TA Buffalo (Not Reviewed)

Data File : H:\GCMS_VOA\S\112409\S1103.D
Acq On : 24 Nov 2009 11:24
Sample : 9K24017-BLK1
Misc :
MS Integration Params: RTEINT.P

Vial: 6
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Quant Time: Nov 24 17:14:48 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 15:43:31 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: 9K25014-BLK1 File ID: S1133.D

Sampled: Prepared: 11/25/09 08:16 Analyzed: 11/25/09 11:51

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
540-59-0	1,2-Dichloroethene, Total	1	2.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone (MEK)	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
124-48-1	Chlorodibromomethane	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
1634-04-4	Methyl tert-Butyl Ether	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: 9K25014-BLK1 File ID: S1133.D

Sampled: Prepared: 11/25/09 08:16 Analyzed: 11/25/09 11:51

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	1.0	U
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
108-05-4	Vinyl acetate	1	5.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.0	96	66 - 137	
4-Bromofluorobenzene	25.0	24.2	97	73 - 120	
Toluene-d8	25.0	23.8	95	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	192842	9.05	219341	9.06	
1,4-Difluorobenzene	381900	4.99	394951	4.99	
Chlorobenzene-d5	206667	7.19	219500	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1133.D
Acq On : 25 Nov 2009 11:51
Sample : 9K25014-BLK1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 25 12:05:17 2009

Vial: 7
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Clean DHC 11/25/09
No TIC
No Add

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	381900	25.00	ug/L	0.00 96.70%
43) CI20	Chlorobenzene-D5	7.19	82	206667	25.00	ug/L	0.00 94.15%
63) CI30	1,4-Dichlorobenzene-	9.05	152	192842	25.00	ug/L	0.00 87.92%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	99757	24.15	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	96.60%		
31) CS15	1,2-Dichloroethane-D	4.69	65	129826	23.95	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	95.80%		
44) CS05	Toluene-D8	6.07	98	435739	23.83	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	95.32%		
62) CS10	p-Bromofluorobenzene	8.12	174	133983	24.21	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	96.84%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.		
3) C010	Chloromethane	0.00	50	0	N.D.		
4) C020	Vinyl chloride	0.00	62	0	N.D.		
5) C015	Bromomethane	0.00	94	0	N.D.		
6) C025	Chloroethane	0.00	64	0	N.D.		
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.		
9) C030	Methylene chloride	0.00	84	0	N.D.		
10) C040	Carbon disulfide	2.77	76	702	N.D.		
11) C036	Acrolein	0.00	56	0	N.D.		
12) C038	Acrylonitrile	0.00	53	0	N.D.		
13) C035	Acetone	0.00	43	0	N.D.		
14) C300	Acetonitrile	0.00	41	0	N.D.		
15) C276	Iodomethane	0.00	142	0	N.D.		
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.		
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.		
19) C255	Methyl Acetate	0.00	43	0	N.D.		
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.		
21) C125	Vinyl Acetate	0.00	43	0	N.D.		
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.		
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.		
24) C272	Tetrahydrofuran	4.33	42	582	N.D.		
25) C222	Bromochloromethane	0.00	128	0	N.D.		
27) C060	Chloroform	0.00	83	0	N.D.		
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.		
29) C120	Carbon tetrachlori	0.00	117	0	N.D.		
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.		
32) C165	Benzene	0.00	78	0	N.D.		
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.		
34) C110	2-Butanone	0.00	43	0	N.D.		
35) C256	Cyclohexane	0.00	56	0	N.D.		
36) C150	Trichloroethene	0.00	95	0	N.D.		
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

1/12/10

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1133.D Vial: 7
Acq On : 25 Nov 2009 11:51 Operator: DHC
Sample : 9K25014-BLK1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 12:05:17 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	0.00	92	0	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.07	43	1709	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	0.00	43	0	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.19	91	580	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	8.30	91	153	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	9.00	146	379	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	9.07	146	903	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	9.33	91	278	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	10.70	180	138	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	10.91	128	400	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

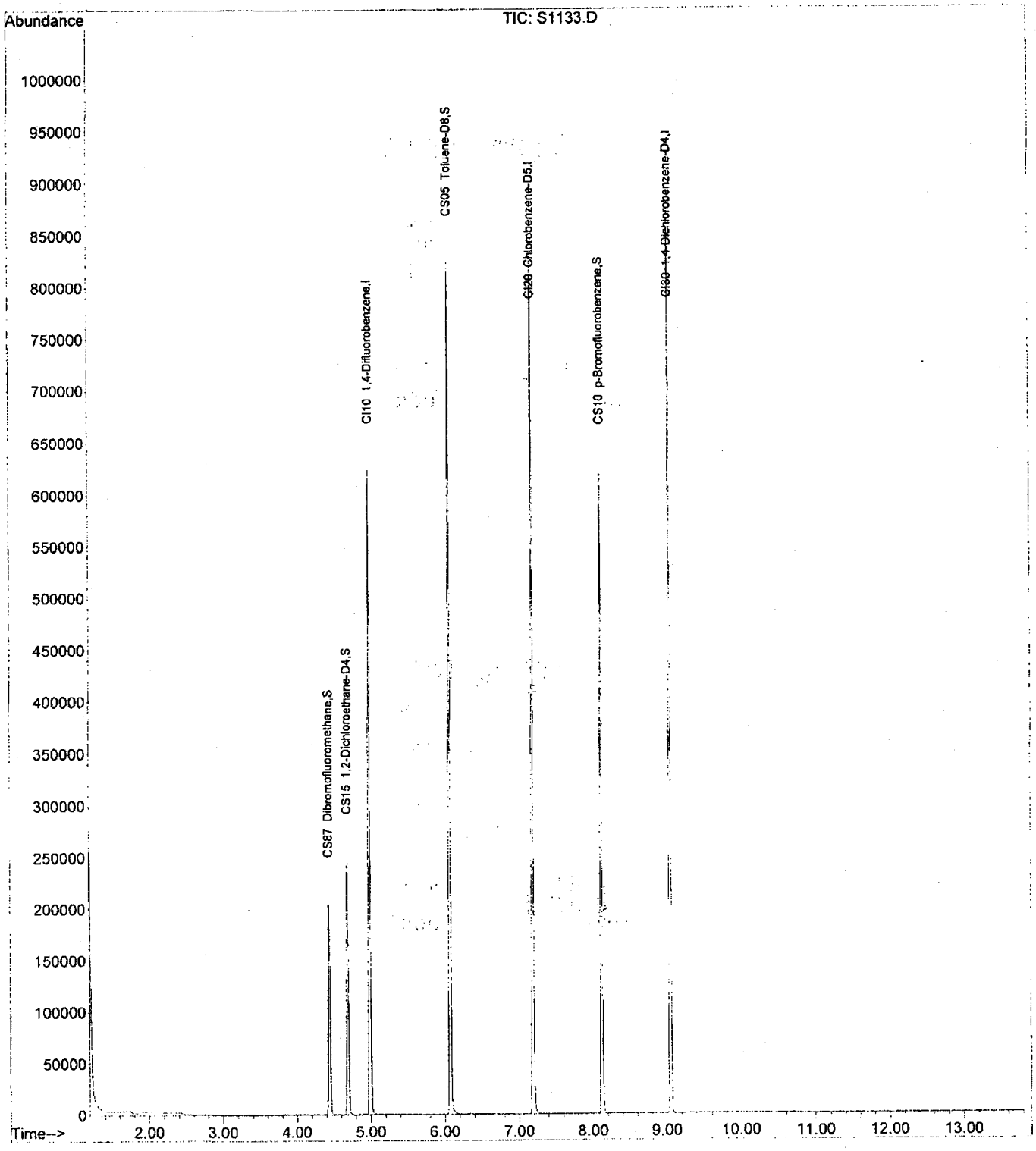
(#) = qualifier out of range (m) = manual integration (+) = signals summed

11/26/09

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1133.D Vial: 7
Acq On : 25 Nov 2009 11:51 Operator: DHC
Sample : 9K25014-BLK1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 25 12:05:17 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Solid-extr Laboratory ID: 9K27033-BLK1 File ID: G6467.D

Sampled: Prepared: 11/27/09 09:00 Analyzed: 11/27/09 13:35

Solids: Preparation: Methanol Prep Initial/Final: 5.06 g / 500 mL

Batch: 9K27033 Sequence: RK92704 Calibration: R9K1805 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg)	Q
71-55-6	1,1,1-Trichloroethane	1	99	U
79-34-5	1,1,2,2-Tetrachloroethane	1	99	U
79-00-5	1,1,2-Trichloroethane	1	99	U
76-13-1	1,1,2-Trichlorotrifluoroethane	1	99	U
75-34-3	1,1-Dichloroethane	1	99	U
75-35-4	1,1-Dichloroethene	1	99	U
120-82-1	1,2,4-Trichlorobenzene	1	99	U
96-12-8	1,2-Dibromo-3-chloropropane	1	99	U
106-93-4	1,2-Dibromoethane (EDB)	1	99	U
95-50-1	1,2-Dichlorobenzene	1	99	U
107-06-2	1,2-Dichloroethane	1	99	U
78-87-5	1,2-Dichloropropane	1	99	U
541-73-1	1,3-Dichlorobenzene	1	99	U
106-46-7	1,4-Dichlorobenzene	1	99	U
78-93-3	2-Butanone (MEK)	1	490	U
591-78-6	2-Hexanone	1	490	U
108-10-1	4-Methyl-2-pentanone (MIBK)	1	490	U
67-64-1	Acetone	1	490	U
71-43-2	Benzene	1	99	U
75-27-4	Bromodichloromethane	1	99	U
75-25-2	Bromoform	1	99	U
74-83-9	Bromomethane	1	99	U
75-15-0	Carbon disulfide	1	99	U
56-23-5	Carbon Tetrachloride	1	99	U
108-90-7	Chlorobenzene	1	99	U
124-48-1	Chlorodibromomethane	1	99	U
75-00-3	Chloroethane	1	99	U
67-66-3	Chloroform	1	99	U
74-87-3	Chloromethane	1	99	U
156-59-2	cis-1,2-Dichloroethene	1	99	U
10061-01-5	cis-1,3-Dichloropropene	1	99	U
110-82-7	Cyclohexane	1	99	U
75-71-8	Dichlorodifluoromethane	1	99	U
100-41-4	Ethylbenzene	1	99	U
98-82-8	Isopropylbenzene	1	99	U
79-20-9	Methyl Acetate	1	99	U
1634-04-4	Methyl tert-Butyl Ether	1	99	U
108-87-2	Methylcyclohexane	1	99	U
75-09-2	Methylene Chloride	1	99	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Solid-extr Laboratory ID: 9K27033-BLK1 File ID: G6467.D

Sampled: Prepared: 11/27/09 09:00 Analyzed: 11/27/09 13:35

Solids: Preparation: Methanol Prep Initial/Final: 5.06 g / 500 mL

Batch: 9K27033 Sequence: RK92704 Calibration: R9K1805 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg)	Q
100-42-5	Styrene	1	99	U
127-18-4	Tetrachloroethene	1	99	U
108-88-3	Toluene	1	99	U
156-60-5	trans-1,2-Dichloroethene	1	99	U
10061-02-6	trans-1,3-Dichloropropene	1	99	U
79-01-6	Trichloroethene	1	99	U
75-69-4	Trichlorofluoromethane	1	99	U
75-01-4	Vinyl chloride	1	200	U
1330-20-7	Xylenes, total	1	200	U

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	2470	3450	140	10 - 190	
4-Bromofluorobenzene	2470	3160	128	10 - 190	
Toluene-d8	2470	3440	139	10 - 190	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	151788	10.73	182026	10.73	
1,4-Difluorobenzene	308995	5.45	345489	5.45	
Chlorobenzene-d5	154985	8.32	173310	8.32	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6467.D Vial: 10
Acq On : 27 Nov 2009 13:35 Operator: DHC
Sample : 9K27033-BLK1 Inst : HP5973G
Misc : ML BATCH QC 11/27 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 27 13:53:20 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112709\G6459.D (27 Nov 2009 10:12)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.45	114	308995	25.00	ug/L	0.00 89.44%
43) CI20	Chlorobenzene-D5	8.32	82	154985	25.00	ug/L	0.00 89.43%
63) CI30	1,4-Dichlorobenzene-	10.73	152	151788	25.00	ug/L	0.00 83.39%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.76	111	119795	32.45	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	129.80%		
31) CS15	1,2-Dichloroethane-D	5.06	65	148186	34.96	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	139.84%#		
44) CS05	Toluene-D8	6.85	98	514378	34.86	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	139.44%#		
62) CS10	p-Bromofluorobenzene	9.58	174	148979	32.02	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	128.08%#		
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.		
3) C010	Chloromethane	0.00	50	0	N.D.		
4) C020	Vinyl chloride	0.00	62	0	N.D.		
5) C015	Bromomethane	0.00	94	0	N.D.		
6) C025	Chloroethane	0.00	64	0	N.D.		
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.		
9) C030	Methylene chloride	3.09	84	576	N.D.		
10) C040	Carbon disulfide	2.76	76	1436	N.D.		
11) C036	Acrolein	0.00	56	0	N.D.		
12) C038	Acrylonitrile	0.00	53	0	N.D.		
13) C035	Acetone	2.78	43	602	0.54	ug/L #	43
14) C300	Acetonitrile	0.00	41	0	N.D.		
15) C276	Iodomethane	0.00	142	0	N.D.		
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.		
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.		
19) C255	Methyl Acetate	3.04	43	341	N.D.		
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.		
21) C125	Vinyl Acetate	0.00	43	0	N.D.		
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.		
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.		
24) C272	Tetrahydrofuran	4.65	42	956	0.85	ug/L #	70
25) C222	Bromochloromethane	0.00	128	0	N.D.		
27) C060	Chloroform	4.60	83	192	N.D.		
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.		
29) C120	Carbon tetrachlori	0.00	117	0	N.D.		
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.		
32) C165	Benzene	0.00	78	0	N.D.		
33) C065	1,2-Dichloroethane	0.00	62	0	N.D.		
34) C110	2-Butanone	4.38	43	7687	4.67	ug/L	93
35) C256	Cyclohexane	0.00	56	0	N.D.		
36) C150	Trichloroethene	0.00	95	0	N.D.		
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6467.D Vial: 10
Acq On : 27 Nov 2009 13:35 Operator: DHC
Sample : 9K27033-BLK1 Inst : HP5973G
Misc : ML BATCH QC 11/27 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 27 13:53:20 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112709\G6459.D (27 Nov 2009 10:12)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)	
39) C130	Bromodichlorometha	0.00	83	0	N.D.		
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.		
41) C012	Methylcyclohexane	0.00	83	0	N.D.		
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.		
45) C230	Toluene	6.92	92	215	N.D.		
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.		
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.		
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.		
49) C210	4-Methyl-2-pentanone	6.84	43	2397	0.57 ug/L #		1
50) C220	Tetrachloroethene	0.00	166	0	N.D.		
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.		
52) C155	Dibromochlorometha	0.00	129	0	N.D.		
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.		
54) C215	2-Hexanone	7.72	43	272	N.D.		
55) C235	Chlorobenzene	8.35	112	247	N.D.		
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.		
57) C240	Ethylbenzene	8.33	91	466	N.D.		
58) C246	m,p-Xylene	0.00	106	0	N.D.		
59) C247	o-Xylene	0.00	106	0	N.D.		
60) C245	Styrene	0.00	104	0	N.D.		
61) C180	Bromoform	0.00	173	0	N.D.		
64) C966	Isopropylbenzene	9.58	105	56	N.D.		
65) C301	Bromobenzene	0.00	156	0	N.D.		
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.		
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.		
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.		
69) C302	n-Propylbenzene	9.58	91	419	N.D.		
70) C303	2-Chlorotoluene	0.00	126	0	N.D.		
71) C289	4-Chlorotoluene	0.00	126	0	N.D.		
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.		
73) C306	tert-Butylbenzene	0.00	134	0	N.D.		
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.		
75) C308	sec-Butylbenzene	0.00	105	0	N.D.		
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.		
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.		
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.		
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.		
80) C310	n-Butylbenzene	0.00	91	0	N.D.		
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.		
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.		
83) C316	Hexachlorobutadien	0.00	225	0	N.D.		
84) C314	Naphthalene	12.72	128	59	N.D.		
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.		

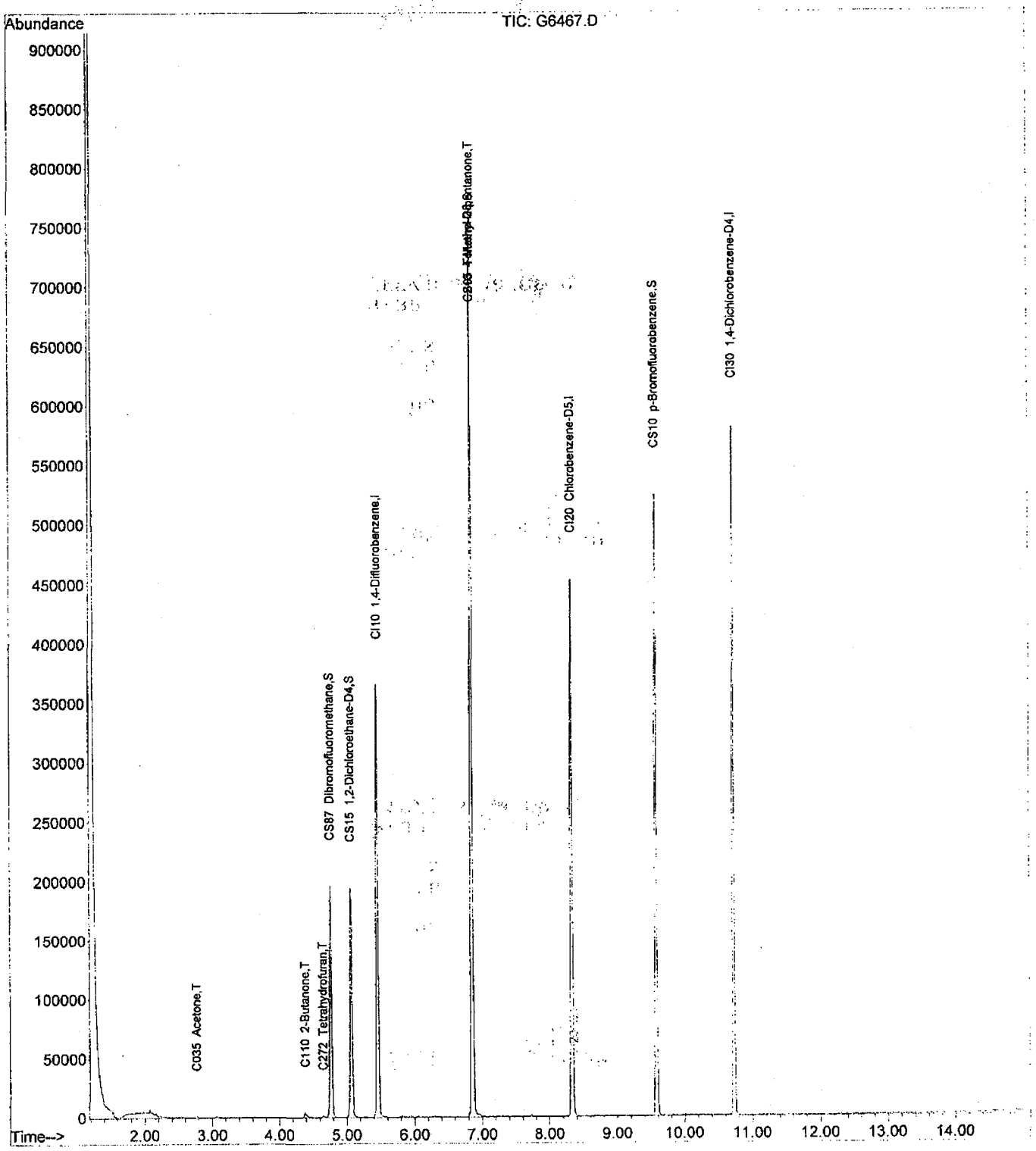
(#) = qualifier out of range (m) = manual integration (+) = signals summed

1/12/10

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6467.D Vial: 10
Acq On : 27 Nov 2009 13:35 Operator: DHC
Sample : 9K27033-BLK1 Inst : HP5973G
Misc : ML BATCH QC 11/27 Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 27 13:53:20 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

LCS

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: 9K24017-BS1 File ID: S1100.D

Sampled: Prepared: 11/24/09 08:00 Analyzed: 11/24/09 10:10

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K24017 Sequence: RK92405 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	24.3	
79-34-5	1,1,2,2-Tetrachloroethane	1	24.4	
79-00-5	1,1,2-Trichloroethane	1	24.0	
76-13-1	1,1,2-Trichlorotrifluoroethane	1	23.2	
75-34-3	1,1-Dichloroethane	1	24.0	
75-35-4	1,1-Dichloroethene	1	23.6	
120-82-1	1,2,4-Trichlorobenzene	1	23.2	
96-12-8	1,2-Dibromo-3-chloropropane	1	22.2	
106-93-4	1,2-Dibromoethane (EDB)	1	24.2	
95-50-1	1,2-Dichlorobenzene	1	22.9	
107-06-2	1,2-Dichloroethane	1	23.9	
540-59-0	1,2-Dichloroethene, Total	1	47.2	
78-87-5	1,2-Dichloropropane	1	23.7	
541-73-1	1,3-Dichlorobenzene	1	22.8	
106-46-7	1,4-Dichlorobenzene	1	22.6	
78-93-3	2-Butanone (MEK)	1	129	
591-78-6	2-Hexanone	1	132	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	131	
67-64-1	Acetone	1	124	
71-43-2	Benzene	1	23.7	
75-27-4	Bromodichloromethane	1	25.1	
75-25-2	Bromoform	1	18.8	
74-83-9	Bromomethane	1	24.3	
75-15-0	Carbon disulfide	1	23.3	
56-23-5	Carbon Tetrachloride	1	24.4	
108-90-7	Chlorobenzene	1	23.0	
124-48-1	Chlorodibromomethane	1	22.3	
75-00-3	Chloroethane	1	23.9	
67-66-3	Chloroform	1	23.9	
74-87-3	Chloromethane	1	24.1	
156-59-2	cis-1,2-Dichloroethene	1	23.6	
10061-01-5	cis-1,3-Dichloropropene	1	25.3	
110-82-7	Cyclohexane	1	23.8	
75-71-8	Dichlorodifluoromethane	1	23.0	
100-41-4	Ethylbenzene	1	23.6	
98-82-8	Isopropylbenzene	1	23.1	
79-20-9	Methyl Acetate	1	26.8	
1634-04-4	Methyl tert-Butyl Ether	1	24.5	
108-87-2	Methylcyclohexane	1	23.8	

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

LCS

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	9K24017-BS1	File ID:	S1100.D
Sampled:		Prepared:	11/24/09 08:00	Analyzed:	11/24/09 10:10
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9K24017	Sequence:	RK92405	Calibration:	R9K2009
Instrument:	HP5973S				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	23.4	
100-42-5	Styrene	1	24.0	
127-18-4	Tetrachloroethene	1	23.4	
108-88-3	Toluene	1	23.3	
156-60-5	trans-1,2-Dichloroethene	1	23.6	
10061-02-6	trans-1,3-Dichloropropene	1	25.1	
79-01-6	Trichloroethene	1	23.6	
75-69-4	Trichlorofluoromethane	1	24.0	
108-05-4	Vinyl acetate	1	131	
75-01-4	Vinyl chloride	1	23.7	
1330-20-7	Xylenes, total	1	70.6	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.0	96	66 - 137	
4-Bromofluorobenzene	25.0	25.8	103	73 - 120	
Toluene-d8	25.0	24.2	97	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	232676	9.05	221647	9.05	
1,4-Difluorobenzene	414824	4.99	401345	4.99	
Chlorobenzene-d5	228295	7.19	222022	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\S\Data\112409\S1100.D
Acq On : 24 Nov 2009 10:10
Sample : 9K24017-BS1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 24 11:50:32 2009

Vial: 3
Operator: DHC
Inst : HP5973S
Multiplr: 1.00
Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 11:50:23 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	414824	25.00	ug/L	0.00 103.36%
43) CI20	Chlorobenzene-D5	7.19	82	228295	25.00	ug/L	0.00 102.83%
63) CI30	1,4-Dichlorobenzene-'	9.05	152	232676	25.00	ug/L	0.00 104.98%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	114056	25.42	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	101.68%		
31) CS15	1,2-Dichloroethane-D	4.69	65	141239	23.98	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	95.92%		
44) CS05	Toluene-D8	6.07	98	488485	24.19	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	96.76%		
62) CS10	p-Bromofluorobenzene	8.12	174	157800	25.81	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	103.24%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	125569	22.98	ug/L #	100
3) C010	Chloromethane	1.47	50	165142	24.10	ug/L	97
4) C020	Vinyl chloride	1.53	62	153900	23.73	ug/L	88
5) C015	Bromomethane	1.80	94	37906	24.27	ug/L	88
6) C025	Chloroethane	1.89	64	21746	23.93	ug/L	89
7) C275	Trichlorofluorometha	2.09	101	146737	24.00	ug/L	98
8) C045	1,1-Dichloroethene	2.58	96	103254	23.61	ug/L	97
9) C030	Methylene chloride	3.04	84	123734	23.38	ug/L	93
10) C040	Carbon disulfide	2.76	76	238119	23.30	ug/L	100
11) C036	Acrolein	2.56	56	219593	488.48	ug/L	96
12) C038	Acrylonitrile	3.29	53	233642	125.66	ug/L	93
13) C035	Acetone	2.72	43	177019	123.78	ug/L	97
14) C300	Acetonitrile	2.98	41	748984	993.33	ug/L	99
15) C276	Iodomethane	2.73	142	128757	20.55	ug/L	99
16) C291	1,1,2-Trichloro-1,2,	2.56	101	104800	23.20	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	276365	24.51	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	117307	23.63	ug/L	98
19) C255	Methyl Acetate	2.97	43	145305	26.83	ug/L	96
20) C050	1,1-Dichloroethane	3.60	63	219749	23.98	ug/L	97
21) C125	Vinyl Acetate	3.65	43	1107433	130.79	ug/L	96
22) C051	2,2-Dichloropropane	4.03	77	141499	24.82	ug/L	95
23) C056	cis-1,2-Dichloroethe	4.06	96	128964	23.56	ug/L	99
24) C272	Tetrahydrofuran	4.29	42	181163	124.14	ug/L	92
25) C222	Bromochloromethane	4.25	128	56708	23.76	ug/L	95
27) C060	Chloroform	4.32	83	204935	23.87	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	172276	24.27	ug/L	96
29) C120	Carbon tetrachloride	4.52	117	141578	24.45	ug/L	100
30) C116	1,1-Dichloropropene	4.53	75	166913	23.98	ug/L	97
32) C165	Benzene	4.69	78	518251	23.67	ug/L	100
33) C065	1,2-Dichloroethane	4.74	62	163190	23.94	ug/L	96
34) C110	2-Butanone	4.10	43	277004	128.68	ug/L	94
35) C256	Cyclohexane	4.42	56	229932	23.75	ug/L	99
36) C150	Trichloroethene	5.17	95	123377	23.57	ug/L	92
37) C140	1,2-Dichloropropane	5.36	63	124564	23.73	ug/L	100
38) C278	Dibromomethane	5.47	93	67226	24.77	ug/L	94

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\S\Data\112409\S1100.D Vial: 3
Acq On : 24 Nov 2009 10:10 Operator: DHC
Sample : 9K24017-BS1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 24 11:50:32 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 11:50:23 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112409\S1099.D (24 Nov 2009 9:25)

Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	130752	25.11 ug/L		97
40) C161	2-Chloroethylvinyl E	5.78	63	435325	126.46 ug/L		94
41) C012	Methylcyclohexane	5.27	83	240378	23.75 ug/L		98
42) C145	cis-1,3-Dichloroprop	5.90	75	172721	25.34 ug/L		99
45) C230	Toluene	6.12	92	329124	23.26 ug/L		93
46) C170	trans-1,3-Dichloropr	6.32	75	150803	25.06 ug/L		97
47) C284	Ethyl Methacrylate	6.35	69	144240	23.68 ug/L	#	94
48) C160	1,1,2-Trichloroethan	6.47	83	85783	23.96 ug/L		99
49) C210	4-Methyl-2-pentanone	6.00	43	558480	130.86 ug/L		95
50) C220	Tetrachloroethene	6.53	166	135639	23.42 ug/L		100
51) C221	1,3-Dichloropropane	6.59	76	191841	23.62 ug/L		100
52) C155	Dibromochloromethane	6.77	129	88093	22.33 ug/L		98
53) C163	1,2-Dibromoethane	6.85	107	103682	24.19 ug/L		100
54) C215	2-Hexanone	6.63	43	386619	131.97 ug/L		92
55) C235	Chlorobenzene	7.21	112	336081	22.97 ug/L		98
56) C281	1,1,1,2-Tetrachloroe	7.28	131	104130	24.89 ug/L		98
57) C240	Ethylbenzene	7.27	91	625700	23.59 ug/L		99
58) C246	m,p-Xylene	7.36	106	486188	47.11 ug/L		97
59) C247	o-Xylene	7.68	106	229815	23.54 ug/L		96
60) C245	Styrene	7.71	104	333765	23.97 ug/L		95
61) C180	Bromoform	7.89	173	49778	18.76 ug/L		100
64) C966	Isopropylbenzene	7.97	105	609061	23.07 ug/L		97
65) C301	Bromobenzene	8.24	156	139179	23.45 ug/L		91
66) C225	1,1,2,2-Tetrachloroe	8.26	83	131218	24.45 ug/L		99
67) C282	1,2,3-Trichloropropa	8.30	110	44254	24.37 ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	122939	124.43 ug/L	#	57
69) C302	n-Propylbenzene	8.30	91	782127	23.67 ug/L		93
70) C303	2-Chlorotoluene	8.39	126	137527	22.79 ug/L		100
71) C289	4-Chlorotoluene	8.47	126	142033	23.18 ug/L		100
72) C304	1,3,5-Trimethylbenze	8.44	105	501874	23.07 ug/L		98
73) C306	tert-Butylbenzene	8.70	134	111841	22.91 ug/L	#	87
74) C307	1,2,4-Trimethylbenze	8.74	105	493456	23.38 ug/L		98
75) C308	sec-Butylbenzene	8.87	105	605346	23.15 ug/L		96
76) C260	1,3-Dichlorobenzene	8.99	146	264275	22.81 ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	539681	23.36 ug/L		98
78) C267	1,4-Dichlorobenzene	9.07	146	269230	22.63 ug/L		99
79) C249	1,2-Dichlorobenzene	9.38	146	254400	22.92 ug/L		98
80) C310	n-Butylbenzene	9.33	91	452673	23.23 ug/L		96
81) C286	1,2-Dibromo-3-Chloro	10.05	75	19773	22.23 ug/L		87
82) C313	1,2,4-Trichlorobenze	10.70	180	138889	23.22 ug/L		99
83) C316	Hexachlorobutadiene	10.81	225	53701	21.94 ug/L		95
84) C314	Naphthalene	10.90	128	326446	25.44 ug/L		99
85) C934	1,2,3-Trichlorobenze	11.10	180	126986	23.51 ug/L		98

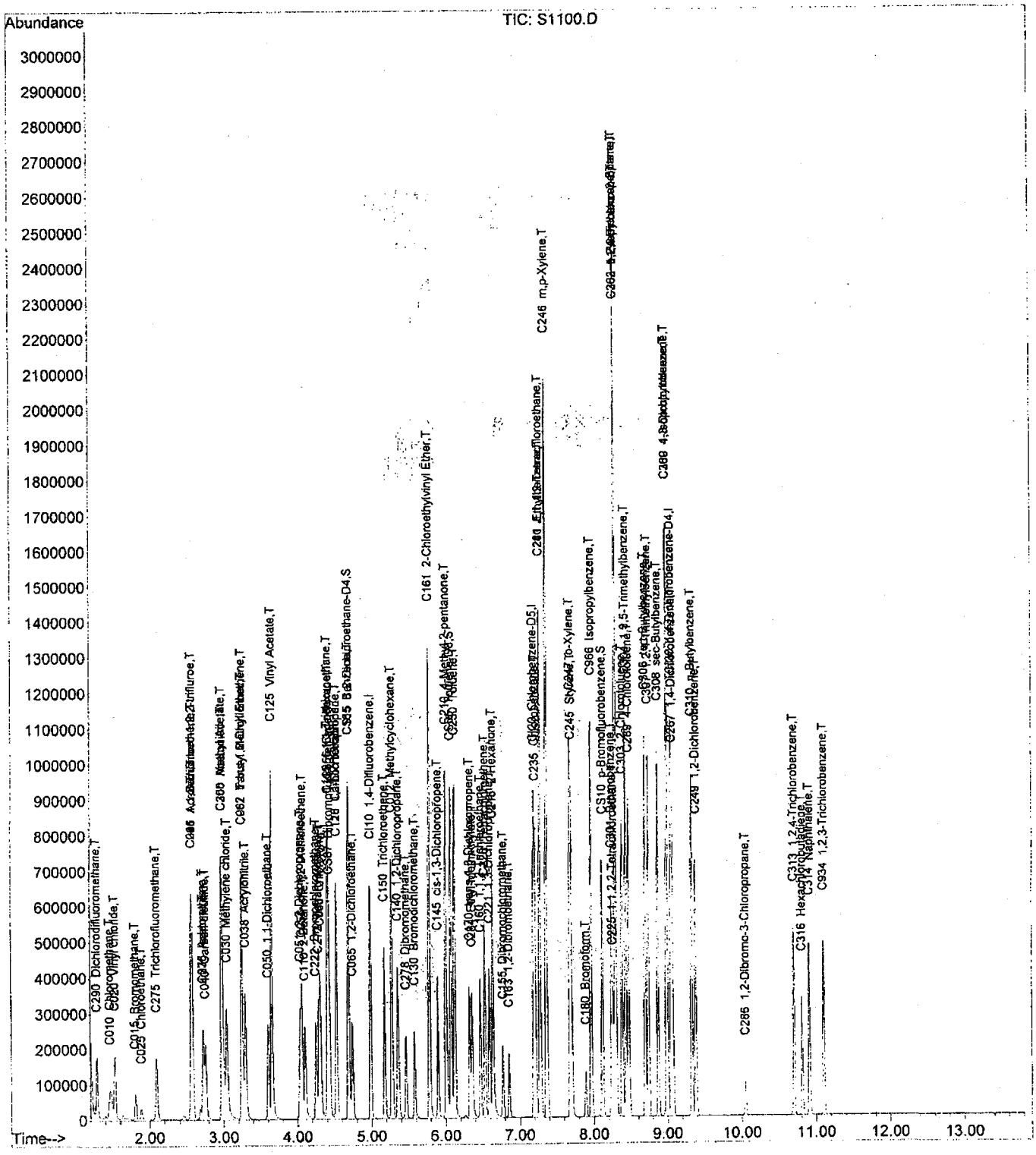
(#) = qualifier out of range (m) = manual integration (+) = signals summed

11/25/09

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\S\Data\112409\S1100.D Vial: 3
Acq On : 24 Nov 2009 10:10 Operator: DHC
Sample : 9K24017-BS1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 24 11:50:32 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Tue Nov 24 11:50:23 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

LCS

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis G&M, Inc. - NY9A8463.4
Matrix:	Water	Laboratory ID:	9K25014-BS1	File ID:	S1130.D
Sampled:		Prepared:	11/25/09 08:16	Analyzed:	11/25/09 10:20
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	25.0	
79-34-5	1,1,2,2-Tetrachloroethane	1	23.2	
79-00-5	1,1,2-Trichloroethane	1	23.9	
76-13-1	1,1,2-Trichlorotrifluoroethane	1	24.2	
75-34-3	1,1-Dichloroethane	1	24.7	
75-35-4	1,1-Dichloroethene	1	24.5	
120-82-1	1,2,4-Trichlorobenzene	1	23.2	
96-12-8	1,2-Dibromo-3-chloropropane	1	20.1	
106-93-4	1,2-Dibromoethane (EDB)	1	23.9	
95-50-1	1,2-Dichlorobenzene	1	23.6	
107-06-2	1,2-Dichloroethane	1	24.3	
540-59-0	1,2-Dichloroethene, Total	1	48.7	
78-87-5	1,2-Dichloropropane	1	24.8	
541-73-1	1,3-Dichlorobenzene	1	23.7	
106-46-7	1,4-Dichlorobenzene	1	23.5	
78-93-3	2-Butanone (MEK)	1	117	
591-78-6	2-Hexanone	1	120	
108-10-1	4-Methyl-2-pentanone (MIBK)	1	120	
67-64-1	Acetone	1	112	
71-43-2	Benzene	1	24.4	
75-27-4	Bromodichloromethane	1	26.0	
75-25-2	Bromoform	1	17.8	
74-83-9	Bromomethane	1	22.9	
75-15-0	Carbon disulfide	1	23.9	
56-23-5	Carbon Tetrachloride	1	25.4	
108-90-7	Chlorobenzene	1	23.6	
124-48-1	Chlorodibromomethane	1	22.7	
75-00-3	Chloroethane	1	24.2	
67-66-3	Chloroform	1	24.5	
74-87-3	Chloromethane	1	24.7	
156-59-2	cis-1,2-Dichloroethene	1	24.4	
10061-01-5	cis-1,3-Dichloropropene	1	25.8	
110-82-7	Cyclohexane	1	24.6	
75-71-8	Dichlorodifluoromethane	1	21.4	
100-41-4	Ethylbenzene	1	24.0	
98-82-8	Isopropylbenzene	1	23.7	
79-20-9	Methyl Acetate	1	24.9	
1634-04-4	Methyl tert-Butyl Ether	1	23.8	
108-87-2	Methylcyclohexane	1	24.3	

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

LCS

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Water Laboratory ID: 9K25014-BS1 File ID: S1130.D

Sampled: Prepared: 11/25/09 08:16 Analyzed: 11/25/09 10:20

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9K25014 Sequence: RK92506 Calibration: R9K2009 Instrument: HP5973S

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
75-09-2	Methylene Chloride	1	23.8	
100-42-5	Styrene	1	24.5	
127-18-4	Tetrachloroethene	1	23.8	
108-88-3	Toluene	1	24.0	
156-60-5	trans-1,2-Dichloroethene	1	24.3	
10061-02-6	trans-1,3-Dichloropropene	1	25.2	
79-01-6	Trichloroethene	1	24.4	
75-69-4	Trichlorofluoromethane	1	25.2	
108-05-4	Vinyl acetate	1	126	
75-01-4	Vinyl chloride	1	23.6	
1330-20-7	Xylenes, total	1	71.7	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.5	94	66 - 137	
4-Bromofluorobenzene	25.0	25.4	102	73 - 120	
Toluene-d8	25.0	24.2	97	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	223032	9.05	219341	9.06	
1,4-Difluorobenzene	398966	4.99	394951	4.99	
Chlorobenzene-d5	219970	7.19	219500	7.19	

* Values outside of QC limits

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1130.D
Acq On : 25 Nov 2009 10:20
Sample : 9K25014-BS1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Nov 25 10:56:40 2009

Vial: 4
Operator: DHC
Inst : HP5973S
Multiplr: 1.00

Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	4.99	114	398966	25.00	ug/L	0.00 101.02%
43) CI20	Chlorobenzene-D5	7.19	82	219970	25.00	ug/L	0.00 100.21%
63) CI30	1,4-Dichlorobenzene-	9.05	152	223032	25.00	ug/L	0.00 101.68%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.44	111	109672	25.42	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	101.68%	
31) CS15	1,2-Dichloroethane-D	4.69	65	133138	23.51	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	94.04%	
44) CS05	Toluene-D8	6.07	98	470949	24.20	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	96.80%	
62) CS10	p-Bromofluorobenzene	8.12	174	149759	25.42	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	101.68%	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.29	85	112229	21.36	ug/L #	100
3) C010	Chloromethane	1.46	50	162660	24.69	ug/L	100
4) C020	Vinyl chloride	1.53	62	147036	23.58	ug/L	86
5) C015	Bromomethane	1.81	94	34356	22.87	ug/L	84
6) C025	Chloroethane	1.89	64	21115	24.16	ug/L	91
7) C275	Trichlorofluorometha	2.10	101	147930	25.15	ug/L	98
8) C045	1,1-Dichloroethene	2.58	96	103079	24.51	ug/L	97
9) C030	Methylene chloride	3.05	84	121082	23.79	ug/L	91
10) C040	Carbon disulfide	2.76	76	234698	23.88	ug/L	100
11) C036	Acrolein	2.56	56	194970	450.94	ug/L	95
12) C038	Acrylonitrile	3.29	53	205563	114.95	ug/L	92
13) C035	Acetone	2.72	43	154252	112.14	ug/L	97
14) C300	Acetonitrile	2.98	41	651968	899.03	ug/L	98
15) C276	Iodomethane	2.73	142	160186	26.59	ug/L	100
16) C291	1,1,2-Trichloro-1,2,	2.56	101	104989	24.16	ug/L	95
17) C962	T-butyl Methyl Ether	3.25	73	258652	23.85	ug/L	94
18) C057	trans-1,2-Dichloroet	3.25	96	116096	24.32	ug/L	99
19) C255	Methyl Acetate	2.97	43	129913	24.94	ug/L	98
20) C050	1,1-Dichloroethane	3.60	63	217773	24.71	ug/L	99
21) C125	Vinyl Acetate	3.65	43	1022799	125.60	ug/L	97
22) C051	2,2-Dichloropropane	4.04	77	141036	25.72	ug/L	97
23) C056	cis-1,2-Dichloroethe	4.06	96	128534	24.41	ug/L	98
24) C272	Tetrahydrofuran	4.29	42	159805	113.86	ug/L	91
25) C222	Bromochloromethane	4.26	128	56394	24.56	ug/L	95
27) C060	Chloroform	4.32	83	202230	24.49	ug/L	100
28) C115	1,1,1-Trichloroethan	4.41	97	170993	25.04	ug/L	97
29) C120	Carbon tetrachloride	4.52	117	141465	25.40	ug/L	100
30) C116	1,1-Dichloropropene	4.54	75	166508	24.88	ug/L	96
32) C165	Benzene	4.69	78	513858	24.40	ug/L	99
33) C065	1,2-Dichloroethane	4.74	62	159534	24.34	ug/L	97
34) C110	2-Butanone	4.10	43	242631	117.19	ug/L	92
35) C256	Cyclohexane	4.42	56	229013	24.59	ug/L	99
36) C150	Trichloroethene	5.17	95	122982	24.42	ug/L	93
37) C140	1,2-Dichloropropane	5.36	63	124934	24.75	ug/L	100
38) C278	Dibromomethane	5.47	93	64273	24.62	ug/L	92

11/12/2010

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1130.D Vial: 4
Acq On : 25 Nov 2009 10:20 Operator: DHC
Sample : 9K25014-BS1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 25 10:56:40 2009 Results File: R9K2009-SIXPT.RES

Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\S\Data\112509\S1129.D (25 Nov 2009 9:50)

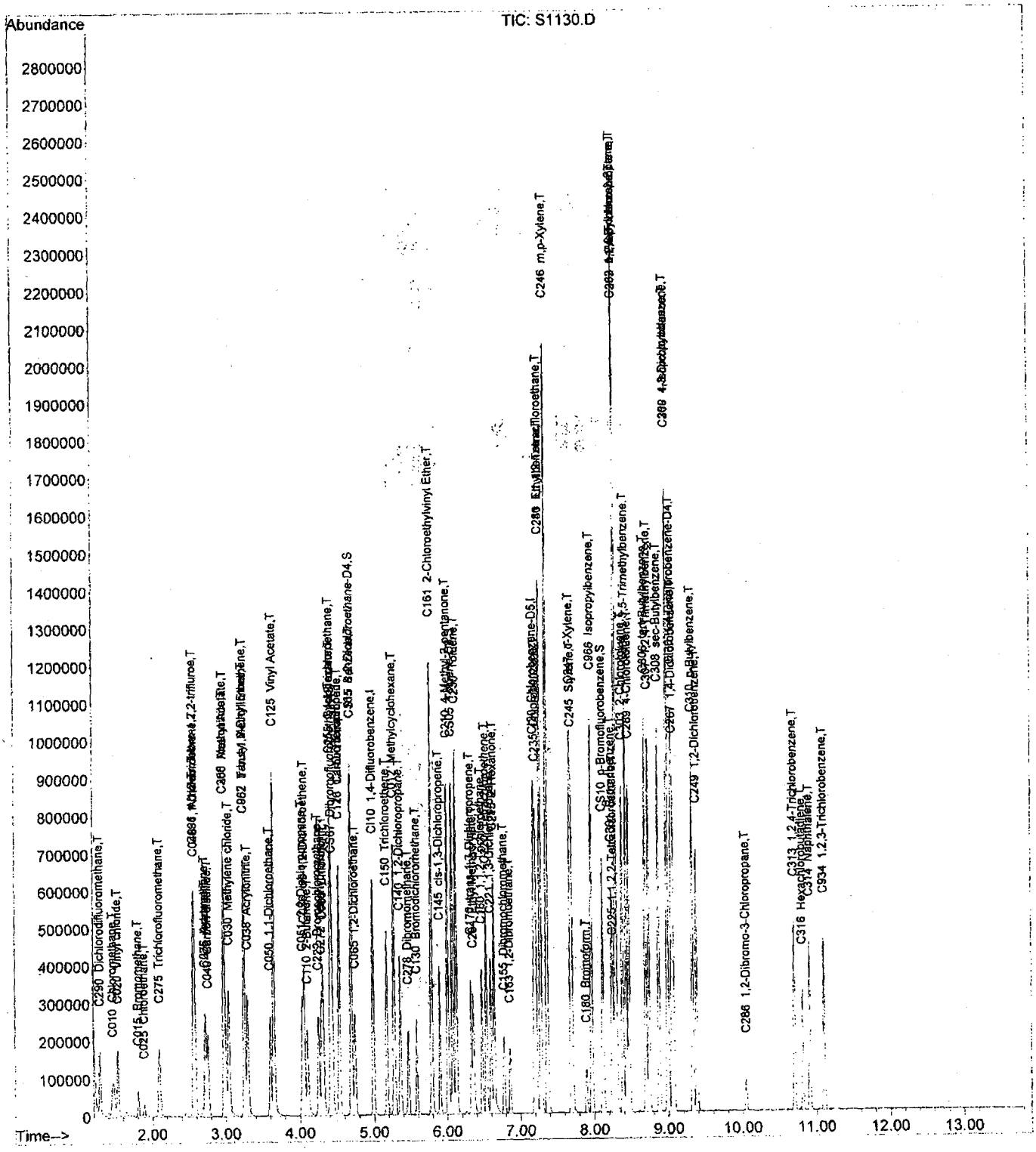
Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	5.58	83	130260	26.01	ug/L		98
40) C161	2-Chloroethylvinyl E	5.78	63	399507	120.67	ug/L		94
41) C012	Methylcyclohexane	5.27	83	236620	24.31	ug/L		99
42) C145	cis-1,3-Dichloroprop	5.90	75	169215	25.82	ug/L		99
45) C230	Toluene	6.12	92	326963	23.99	ug/L		95
46) C170	trans-1,3-Dichloropr	6.32	75	146305	25.24	ug/L		96
47) C284	Ethyl Methacrylate	6.35	69	131837	22.54	ug/L	#	93
48) C160	1,1,2-Trichloroethan	6.47	83	82428	23.90	ug/L		98
49) C210	4-Methyl-2-pentanone	6.01	43	492562	119.78	ug/L		94
50) C220	Tetrachloroethene	6.53	166	133102	23.85	ug/L		97
51) C221	1,3-Dichloropropane	6.59	76	185039	23.64	ug/L		99
52) C155	Dibromochloromethane	6.77	129	86413	22.70	ug/L		94
53) C163	1,2-Dibromoethane	6.86	107	98529	23.86	ug/L		96
54) C215	2-Hexanone	6.63	43	339831	120.39	ug/L		93
55) C235	Chlorobenzene	7.21	112	332342	23.58	ug/L		99
56) C281	1,1,1,2-Tetrachloroe	7.28	131	101821	25.26	ug/L		97
57) C240	Ethylbenzene	7.27	91	612337	23.96	ug/L		98
58) C246	m,p-Xylene	7.36	106	477642	48.04	ug/L		96
59) C247	o-Xylene	7.68	106	222645	23.67	ug/L		93
60) C245	Styrene	7.71	104	329048	24.52	ug/L		96
61) C180	Bromoform	7.89	173	45559	17.82	ug/L		99
64) C966	Isopropylbenzene	7.97	105	599327	23.68	ug/L		97
65) C301	Bromobenzene	8.25	156	136104	23.93	ug/L		98
66) C225	1,1,2,2-Tetrachloroe	8.26	83	119600	23.25	ug/L		98
67) C282	1,2,3-Trichloropropa	8.30	110	39578	22.73	ug/L		100
68) C283	t-1,4-Dichloro-2-But	8.30	51	113896	120.26	ug/L	#	54
69) C302	n-Propylbenzene	8.30	91	767329	24.23	ug/L		93
70) C303	2-Chlorotoluene	8.39	126	136199	23.55	ug/L		100
71) C289	4-Chlorotoluene	8.47	126	141337	24.07	ug/L		100
72) C304	1,3,5-Trimethylbenze	8.44	105	491205	23.56	ug/L		97
73) C306	tert-Butylbenzene	8.70	134	108573	23.20	ug/L	#	90
74) C307	1,2,4-Trimethylbenze	8.74	105	481240	23.79	ug/L		96
75) C308	sec-Butylbenzene	8.87	105	583218	23.26	ug/L		95
76) C260	1,3-Dichlorobenzene	8.99	146	263361	23.72	ug/L		99
77) C309	4-Isopropyltoluene	8.99	119	516400	23.32	ug/L		99
78) C267	1,4-Dichlorobenzene	9.07	146	268083	23.51	ug/L		98
79) C249	1,2-Dichlorobenzene	9.38	146	251028	23.60	ug/L		97
80) C310	n-Butylbenzene	9.33	91	435421	23.31	ug/L		95
81) C286	1,2-Dibromo-3-Chloro	10.05	75	16878	20.13	ug/L		84
82) C313	1,2,4-Trichlorobenze	10.70	180	132741	23.15	ug/L		99
83) C316	Hexachlorobutadiene	10.81	225	51283	21.85	ug/L		100
84) C314	Naphthalene	10.91	128	287863	23.40	ug/L		97
85) C934	1,2,3-Trichlorobenze	11.11	180	119264	23.03	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (QT Reviewed)

Data File : D:\MSDChem\S\Data\112509\S1130.D Vial: 4
Acq On : 25 Nov 2009 10:20 Operator: DHC
Sample : 9K25014-BS1 Inst : HP5973S
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P

Quant Time: Nov 25 10:56:40 2009 Results File: R9K2009-SIXPT.RES
Quant Method : D:\MSDCHEM\S...\R9K2009-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Wed Nov 25 10:56:30 2009
Response via : Initial Calibration
DataAcq Meth : VOA



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

LCS

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Matrix: Solid-extr Laboratory ID: 9K27033-BS1 File ID: G6466.D

Sampled: Prepared: 11/27/09 09:00 Analyzed: 11/27/09 13:13

Solids: Preparation: Methanol Prep Initial/Final: 5.09 g / 500 mL

Batch: 9K27033 Sequence: RK92704 Calibration: R9K1805 Instrument: HP5973G

CAS NO.	COMPOUND	DILUTION	CONC. (ug/kg)	Q
75-35-4	1,1-Dichloroethene	1	2780	
71-43-2	Benzene	1	2610	
108-90-7	Chlorobenzene	1	2500	
108-88-3	Toluene	1	2530	
79-01-6	Trichloroethene	1	2620	

SYSTEM MONITORING COMPOUND	ADDED (ug/kg)	CONC (ug/kg)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	2460	3430	139	10 - 190	
4-Bromofluorobenzene	2460	3140	128	10 - 190	
Toluene-d8	2460	3400	139	10 - 190	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	151334	10.73	182026	10.73	
1,4-Difluorobenzene	315614	5.45	345489	5.45	
Chlorobenzene-d5	157837	8.33	173310	8.32	

* Values outside of QC limits

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6466.D Vial: 9
Acq On : 27 Nov 2009 13:13 Operator: DHC
Sample : 9K27033-BS1 Inst : HP5973G
Misc : ML BATCH QC 11/27 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 27 13:50:58 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112709\G6459.D (27 Nov 2009 10:12)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.45	114	315614	25.00	ug/L	0.00 91.35%
43) CI20	Chlorobenzene-D5	8.33	82	157837	25.00	ug/L	0.00 91.07%
63) CI30	1,4-Dichlorobenzene-	10.73	152	151334	25.00	ug/L	0.00 83.14%
System Monitoring Compounds							
26) CS87	Dibromofluoromethane	4.76	111	124106	32.92	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	131.68%#		
31) CS15	1,2-Dichloroethane-D	5.06	65	150941	34.87	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	139.48%#		
44) CS05	Toluene-D8	6.85	98	520846	34.66	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	138.64%#		
62) CS10	p-Bromofluorobenzene	9.58	174	151379	31.95	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	127.80%#		
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.		
3) C010	Chloromethane	0.00	50	0	N.D.		
4) C020	Vinyl chloride	0.00	62	0	N.D.		
5) C015	Bromomethane	0.00	94	0	N.D.		
6) C025	Chloroethane	0.00	64	0	N.D.		
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	2.57	96	124991	28.34	ug/L	96
9) C030	Methylene chloride	3.09	84	606	N.D.		
10) C040	Carbon disulfide	2.77	76	1836	N.D.		
11) C036	Acrolein	2.59	56	72	0.51	ug/L #	13
12) C038	Acrylonitrile	0.00	53	0	N.D.		
13) C035	Acetone	0.00	43	0	N.D.		
14) C300	Acetonitrile	0.00	41	0	N.D.		
15) C276	Iodomethane	0.00	142	0	N.D.		
16) C291	1,1,2-Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.		
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.		
19) C255	Methyl Acetate	3.04	43	140	N.D.		
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.		
21) C125	Vinyl Acetate	0.00	43	0	N.D.		
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.		
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.		
24) C272	Tetrahydrofuran	4.65	42	1069	0.93	ug/L	82
25) C222	Bromochloromethane	0.00	128	0	N.D.		
27) C060	Chloroform	4.60	83	202	N.D.		
28) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.		
29) C120	Carbon tetrachlori	0.00	117	0	N.D.		
30) C116	1,1-Dichloropropen	0.00	75	0	N.D.		
32) C165	Benzene	5.07	78	566380	26.60	ug/L	99
33) C065	1,2-Dichloroethane	5.07	62	5089	0.74	ug/L #	1
34) C110	2-Butanone	4.38	43	7929	4.72	ug/L	96
35) C256	Cyclohexane	0.00	56	0	N.D.		
36) C150	Trichloroethene	5.68	95	141866	26.67	ug/L	98
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6466.D Vial: 9
Acq On : 27 Nov 2009 13:13 Operator: DHC
Sample : 9K27033-BS1 Inst : HP5973G
Misc : ML BATCH QC 11/27 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Nov 27 13:50:58 2009 Results File: R9K1805-SIXPT.RES

Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA
IS QA File : D:\MSDChem\G\Data\112709\G6459.D (27 Nov 2009 10:12)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcyclohexane	5.68	83	1590	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.92	92	347341	25.71 ug/L	94
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentanone	6.84	43	2436	0.56 ug/L #	1
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	7.73	43	297	N.D.	
55) C235	Chlorobenzene	8.35	112	382648	25.45 ug/L	98
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	8.58	91	217	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
61) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	0.00	105	0	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	51	0	N.D.	
69) C302	n-Propylbenzene	9.58	91	614	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	0.00	105	0	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	0.00	105	0	N.D.	
75) C308	sec-Butylbenzene	0.00	105	0	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	0.00	91	0	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	12.71	128	62	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

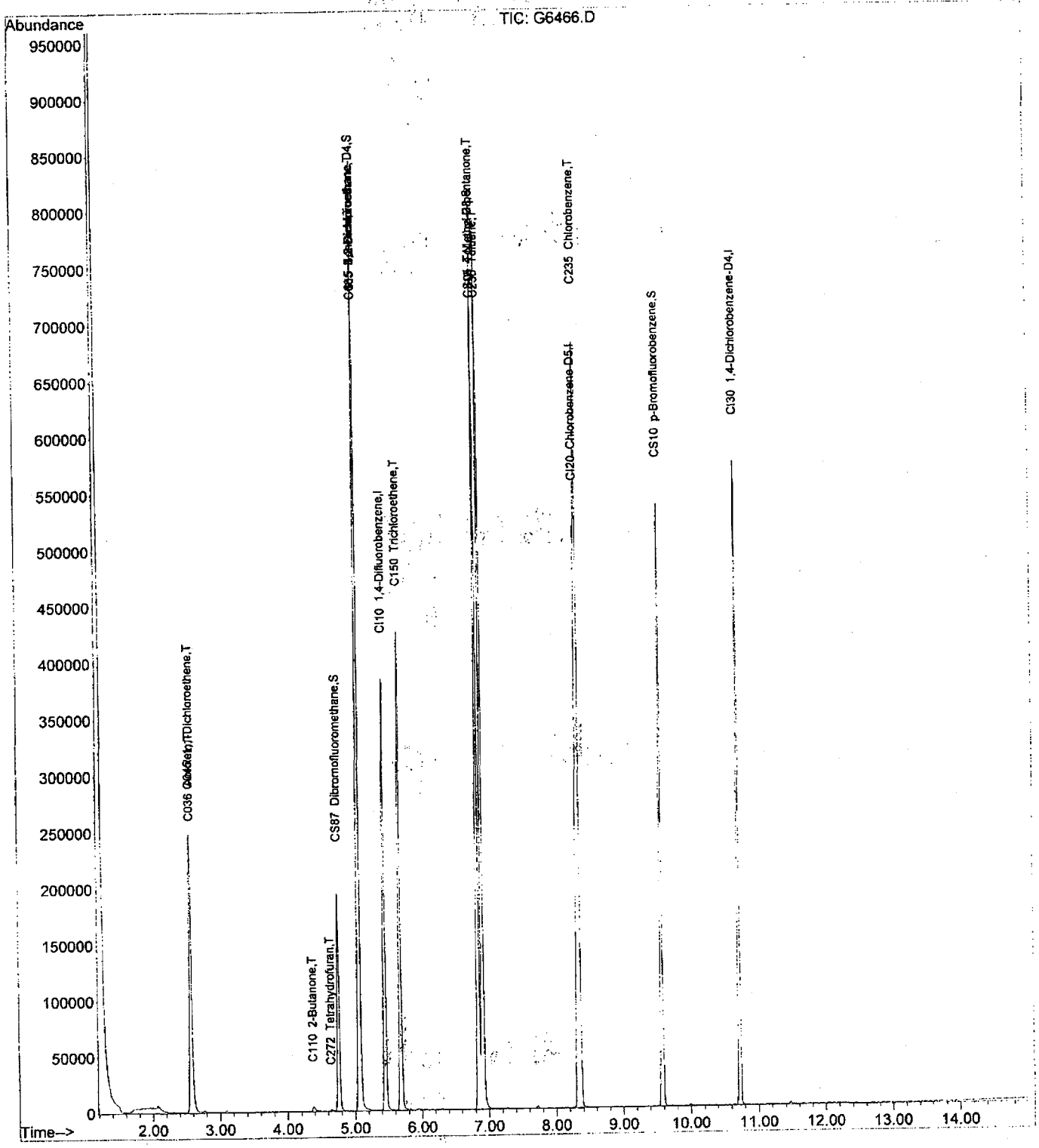
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report TA Buffalo (Not Reviewed)

Data File : D:\MSDChem\G\Data\112709\G6466.D
Acq On : 27 Nov 2009 13:13
Sample : 9K27033-BS1
Misc : ML BATCH QC 11/27
MS Integration Params: RTEINT.P

Vial: 9
Operator: DHC
Inst : HP5973G
Multiplr: 1.00

Quant Time: Nov 27 13:50:58 2009 Results File: R9K1805-SIXPT.RES
Quant Method : D:\MSDCHEM\G...\R9K1805-SIXPT.M (RTE Integrator)
Title : 8260 5ML WATER
Last Update : Fri Nov 27 11:29:28 2009
Response via : Initial Calibration
DataAcq Meth : VOA



HOLDING TIME SUMMARY

8260B

Laboratory: TestAmerica Buffalo SDG: DRAFT

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis G&M, Inc. - NY9A8463.4

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
GW-1	11/16/09 13:45	11/20/09 10:30	11/24/09 08:00	8	14	11/24/09 17:55	8	14	
GW-1	11/16/09 13:45	11/20/09 10:30	11/24/09 08:00	8	14	11/25/09 12:19	9	14	
GW-2	11/17/09 08:40	11/20/09 10:30	11/24/09 08:00	7	14	11/24/09 18:19	7	14	
GW-3	11/17/09 09:02	11/20/09 10:30	11/24/09 08:00	7	14	11/24/09 18:44	7	14	
GW-3	11/17/09 09:02	11/20/09 10:30	11/24/09 08:00	7	14	11/25/09 12:43	8	14	
GW-4	11/17/09 11:10	11/20/09 10:30	11/24/09 08:00	7	14	11/24/09 19:08	7	14	
GW-6	11/18/09 11:15	11/20/09 10:30	11/24/09 08:00	6	14	11/24/09 19:32	6	14	
GW-6	11/18/09 11:15	11/20/09 10:30	11/24/09 08:00	6	14	11/25/09 13:07	7	14	
GW-5	11/19/09 11:25	11/20/09 10:30	11/24/09 08:00	5	14	11/24/09 19:56	5	14	
GW-5	11/19/09 11:25	11/20/09 10:30	11/24/09 08:00	5	14	11/25/09 13:32	6	14	
GW-6 (11-12)	11/18/09 11:15	11/20/09 10:30	11/27/09 09:00	9	14	11/27/09 16:47	9	14	
GW-6 (11-12)	11/18/09 11:15	11/20/09 10:30	11/27/09 09:00	9	14	11/30/09 13:25	12	14	
TRIP BLANK	11/19/09 00:00	11/20/09 10:30	11/24/09 08:00	5	14	11/24/09 20:21	5	14	

* Indicates a Holding Time violation.

PREPARATION BENCH SHEET

9K24017

TestAmerica Buffalo

rinted: 1/12/2010 8:41:50AM

Matrix: Water **Prepared using: GCMS Volatiles - 5030B MS** **Surrogate used: 9110801**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Bar Code	Extraction Comments
9K24017-BLK1	QC	11/24/09 08:00	5	5				1		
9K24017-BS1	QC	11/24/09 08:00	5	5	9111359		5000	1		
RSK0591-01	8260 TCL4.3	11/24/09 08:00	5	5				1		A00175,NI01
RSK0591-02	8260 TCL4.3	11/24/09 08:00	5	5				1		A00175,NI01
RSK0591-03	8260 TCL4.3	11/24/09 08:00	5	5				1		A00175,NI01
RSK0792-01	8260	11/24/09 08:00	5	5				1		A00039,
RSK0792-01	8260 BTEX	11/24/09 08:00	5	5				1		A00039
RSK0792-02	8260	11/24/09 08:00	5	5				1		A00039,
RSK0792-02	8260 BTEX	11/24/09 08:00	5	5				1		A00039
RSK0792-03	8260	11/24/09 08:00	5	5				1		A00039,
RSK0792-03	8260 BTEX	11/24/09 08:00	5	5				1		A00039
RSK0792-04	8260	11/24/09 08:00	5	5				1		A00039,
RSK0792-04	8260 BTEX	11/24/09 08:00	5	5				1		A00039
RSK0792-05	8260	11/24/09 08:00	5	5				1		A00039,
RSK0792-05	8260 BTEX	11/24/09 08:00	5	5				1		A00039
RSK0821-06RE	8260	11/24/09 08:00	5	5				1		A00039,
RSK0825-01	8260	11/24/09 08:00	5	5				1		A00039,
RSK0825-02	8260	11/24/09 08:00	5	5				1		A00039,
RSK0825-03	8260	11/24/09 08:00	5	5				1		A00039,
RSK0825-04	8260	11/24/09 08:00	5	5				1		A00039,
RSK0843-01	8260	11/24/09 08:00	5	5				1		A00039,
RSK0991-01	8260 TCL4.3	11/24/09 08:00	5	5				1		
RSK0991-02	8260 TCL4.3	11/24/09 08:00	5	5				1		

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BENCH SHEET

9K24017

TestAmerica Buffalo

rinted: 1/12/2010 8:41:50AM

Matrix: Water **Prepared using: GCMS Volatiles - 5030B MS** **Surrogate used: 9110801**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Bar Code	Extraction Comments
RSK0991-03	8260 TCL4.3	11/24/09 08:00	5	5				1		
RSK0991-04	8260 TCL4.3	11/24/09 08:00	5	5				1		
RSK0991-05	8260 TCL4.3	11/24/09 08:00	5	5				1		
RSK0991-06	8260 TCL4.3	11/24/09 08:00	5	5				1		
RSK0991-08	8260 TCL4.3	11/24/09 08:00	5	5				1		

318/328

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BENCH SHEET

9K25014

TestAmerica Buffalo

rinted: 1/12/2010 8:42:13AM

Matrix: Water **Prepared using: GCMS Volatiles - 5030B MS** **Surrogate used: 9110801**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Bar Code	Extraction Comments
9K25014-BLK1	QC	11/25/09 08:16	5	5				1		
9K25014-BS1	QC	11/25/09 08:16	5	5	9111359		5000	1		
RSK0837-01	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-02	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-03	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-04	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-05	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-06	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-07	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-08	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-09	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-10	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-11	8260	11/24/09 08:00	5	5				1		A00039,
RSK0837-12	8260	11/24/09 08:00	5	5				1		A00039,
RSK0843-02	8260	11/24/09 08:00	5	5				1		A00039,
RSK0867-01	8260	11/24/09 08:00	5	5				1		A00039,
RSK0867-02	8260	11/24/09 08:00	5	5				1		A00039,
RSK0867-03	8260	11/24/09 08:00	5	5				1		A00039,
RSK0867-04	8260	11/24/09 08:00	5	5				1		A00039,
RSK0898-01	8260	11/24/09 08:00	5	5				1		A00039,
RSK0991-01RE	8260 TCL4.3	11/24/09 08:00	5	5				1		From 9K24017 by DHC on 11/2
RSK0991-03RE	8260 TCL4.3	11/24/09 08:00	5	5				1		From 9K24017 by DHC on 11/2
RSK0991-05RE	8260 TCL4.3	11/24/09 08:00	5	5				1		From 9K24017 by DHC on 11/2

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BENCH SHEET

9K25014

TestAmerica Buffalo

rinted: 1/12/2010 8:42:13AM

Matrix: Water **Prepared using: GCMS Volatiles - 5030B MS** **Surrogate used: 9110801**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Bar Code	Extraction Comments
RSK0991-06RE	8260 TCL4.3	11/24/09 08:00	5	5				1		From 9K24017 by DHC on 11/2

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Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

PREPARATION BENCH SHEET

9K27033

TestAmerica Buffalo

rinted: 1/12/2010 8:42:36AM

Matrix: Solid-extr **Prepared using: GCMS Volatiles - Methanol Prep** **Surrogate used: 9111127**

Lab Number	Analysis	Prepared	Initial (g)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Bar Code	Extraction Comments
9K27033-BLK1	QC	11/27/09 09:00	5.06	500				1000		
9K27033-BS1	QC	11/27/09 09:00	5.09	500	9110898		1000	1000		
RSK0711-02RE	8260 TCL4.3	11/27/09 09:00	5.22	500				1000		Re-extract added 11/27/2009 by
RSK0929-06	8260	11/27/09 09:00	5.03	500				1000		A00039,
RSK0987-05RE	8260	11/27/09 09:00	5.07	500				1000		Re-extract added 11/27/2009 by
RSK0987-09	8260	11/27/09 09:00	5	500				1000		A00039,
RSK0987-09RE	8260	11/27/09 09:00	5	500				1000		A00039,
RSK0991-07	8260 TCL4.3	11/27/09 09:00	5.14	500				1000		
RSK0991-07RE	8260 TCL4.3	11/27/09 09:00	5.14	500				1000		Added 11/28/2009 by DHC

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Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
11/16/09	0838	RJ	G6164	R K91602 -TUN1	—	1µl	—	1
	—		G6165	-CCV1	QC	5µl		1
	0936		G6166	-CCV1				—
	1011		G6167	-CCV2				—
	1045		G6168	91K16009-BS1				—
	—		G6169	-BIK1				—
	1218		G6170	-BIK1				—
	1255		G6171	RSK0396-05	K0996			1
	1318		G6172	RSK0396-08				1
	1341		G6173	9K16009-MS1				1
	1403		G6174	MSD1				1
	—		G6175	IBIK				—
	1448		G6176	-16				1
			G6177	91K16009-MS2				1
			G6178	-MSD2				1
			G6179	IBIK	—			—
			G6180	RSK0604-05RE	K0604			2
11/18/09	1208	JHC	G6181	RK91820 -TUN1	QC	1µl		—
	—		82	-CAL1		5ml		—
	1308		83	-CAL1				—
	1331		84	-CAL2				—
	1353		85	-CAL3				—
	1415		86	(mid) -CAL4				—
	1438		87	-CAL5				—
	1500		88	-CAL6				—
	—		89	-CAL7				—
	1545		90	-CAL7				—
	—		91	-CAL8				—
	1630		92	-CAL9				—
	1652		93	(mid) -CALA				—
	1715		94	-CALB				—
	1737		95	-CALC				—
	—		96	IBLK	—			—

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

STD #	IS/SS MIX #	ReRun?	pH <2	Comments
9110192				PASS
9110909	9110789			N.G.
↓	9110871			R9K1501 6pt.
9110910				R9I1710A01.D
9110908 / 9110878				RK91K16009-SCV
				Headspace
9110908				RSK0396-08
↓				↓
				Headspace
9110908				RSK0396-16
↓				↓
				Headspace
				PASS
9110027, 9110055, 9111014 = 9111022	9110789 / 9110871			
↓				
= 9111023				8260 conc
= 9111024				(R9K1805)
= 9111025				
= 9111026				
= 9111027				
9100558, 9110032, 9110254, 9110325 = 9111028				
↓				
= 9111029				Add conc
= 9111030				(R9K1805-Add)
= 9111031				
= 9111032				
= 9111033				

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
11/25/09	2014	ND	G6429	RSK0883-13RE1	K0883	5mL	—	4
11/25/09	2047	ND	G6430	RK92531-TUN1	QC	1µL	7	7
	2109		31	-CCV1		5mL		
	2132		32	-CCV2				
	2154		33	9K25701-BS1				
	2235		34	9K25702-BS1 11/17			5.13	
	2320	ND 11/27/09	35	-BLK1			5.06	
	2257 2320		36	9K25095-BS1 11/25			5.26	
	2343		37	-BLK1			5.01	
11/26/09	0006		38	9K25101-BLK1			~~4.98~~	1
	0088		39	RSK0698-02	K0698		1.738	1
	0100		40	RSK0786-03RE1	K0786		5.87	2
	0122		41	RSK0711-03RE1 (ND)	K0711		5.10	1
	0145		42	04RE1 (ND)	1		5.04	1
	0209		43	RSK0850-01 (E)	K0850		7	20
	0231		44	02				20
	0253		45	03				20
	0316		46	04				20
	0339		47	05				20
	0402		48	06				20
	0425		49	07				20
	0448		50	08				20
	0510		51	09				1
	0533		52	RSK1107-01	K1107			5
	0556		53	02				5
	0619		54	03				1
	0641		55	04				1
	0704		56	RSK1110-01	K1110			1
	0727		G6457	RSK1112-02	K1112			40
11/27/09	0948	DK	G6458	RK92704-TUN1	QC	1ml	7	—
	1012		59	-CCV1		5ml		—
	1058		60	9K27014-BS1				—
	1120		61	RK92709-CCV2				—
	1142		62	IBLK				—
	1205		63	9K27014-BLK1				—
	1227		64	9K27030-BS1	QC ND		5.17	—
	1250		65	-BLK1	1		5.09	—
	1313		66	9K27033-BS1	QC 11/27		5.09	—

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

STD #	IS/SS MIX #	ReRun?	pH <2	Comments
	9110789/9110871		X	
9110192			—	PASS
9111310	9110789/		—	8260 (R9K1805)
9111106	9110871		—	ADD (R9K1805-ADD)
9111166			—	
9110898			—	
—			—	
9110898			—	
7			—	
			—	
			—	
		Y	—	RE1 @ 20x
		Y	—	RE1 @ 5X
			7	
			7	
			7	
			7	
			7	
			7	
			7	
			7	
			7	
			7	
			x	
		Y	x	RE1 @2X
			x	
			x	
			x	
9110192			—	PASS
9111501	9110789/		—	8260 (R9K1805)
9111502	9110871		—	
9111106			—	Add (R9K1805-Add)
—			—	
—			—	
9110898 (5cmp mL)			—	
—			—	
9110898 (5cmp mL)			—	

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
11/27/09	1335	DHC	G6467	9K27033-BLK1	QC	5ml	5.06	—
	1409		68	RSK1107-03 RE1 (NV)	K1107		—	2
	1432		69	RSK0711-03 RE1	K0711		5.10	20
	1454		70	04 RE1			5.04	5
	1517		71	02 RE1 (NV)			5.22	1
	1539		72	RSK0929-06	K0929		5.03	1
	1602		73	RSK0987-05 RE1	K0987		5.07	1
	1624		74	09			5.00	4
	1647		75	RSK0991-07	K0991		5.14	1
	1709		76	RSK0953-01	K0953		5.97	1
11/28/09	1005	DHC	G6477	RK92801-TUN1	QC	1ml		—
	1027		78	-CCV1		5ml		—
	1104		79	9K28002-BS1				—
	1127		80	RK92801-CCV2				—
	1149		81	IBLK				—
	1212		82	9K28002-BLK1				—
	1256		83	RSK0711-02 RE1	K0711		5.22	2
	1319		84	RSK0987-09 RE1	K0987		5.00	10
	1341		85	RSK0991-07 RE1	K0991		5.14	20
	1404		86	BK0953-01 RE1	K0953		5.97	2
	1426		87	RSK0885-03 MC TC	K0885		5.704	1
	1449		88	04 MC TC			6.276	1
	1511		89	RSK0926-01	K0926			1
	1534		90	02				1
	1556		91	03				1
	1619		92	04				1
	1641		93	05				1
	1704		94	06				1
	1726		95	07				1
	1749		96	08				1
	1812		97	09				1
	1834		98	10				1
	1857		99	11				1
	1919		G6500	12				1
	1942		01	13				1
11/30/09	1000	RS	G6502	RK93007-TUN1	—	1ml	—	—
	1030		G6503	-CCV1	QC	5ml	—	—
	1105		G6504	-CCV2				—

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

STO #	IS/SS MIX #	ReRun?	pH <2	Comments
	9110792			
	9110871	Y		Surr out
		Y		RE1 @2x
		Y		RE1 @10x
		Y		RE1 @20x
		Y		RE1 @ 2x
9110192				PASS
9111501 (Full) 9.0mL used	9110789			8260 (R9K1805)
9111502 (Full)	9110871			
9111106				Add (R9K1805-Add)
		Y		RE @5x (HL)
		Y		RE@50x (HL)
			X	
		Y	X	RE@5x
		Y	X	RE@4x
		Y	X	RE@2x
			X	
		Y	X	RE@5x
			X	
9110192				PASS #11NG
9111501	9111515			R9K1805-6pt
9111529	9110871			R9K1805-Add

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
11/30/09	1127	RD	G6505	9K30009-BS1	QC	5mL	—	—
	1150		G6506	IBIK				—
	1222		G6507	-BIK1	↓			—
	1302		G6508	RSK0711-02RE	K0711		5.22	5
	1325		G6509	RSK0991-07RE	K0991		5.14	50
	1347		G6510	IBIK	—		↓	—
	1410		G6511	RSK1016-01	K1016			1
	1433		G6512	02				1
	1455		G6513	03				1
	1518		G6514	04				1
	1540		G6515	05				1
	1603		G6516	06				1
	1625		G6517	07				1
	1648		G6518	08				1
	1710		G6519	09				1
	1733		G6520	10				1
	1755		G6521	11				1
	1818		G6522	12				1
	1840		G6523	13				1
	1903		G6524	14				1
	1926		G6525	RSK0959-01	K0959			1
	1948		G6526	02				1
	2011		G6527	03				1
	2033		G6528	04	↓	↓	↓	1

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-04-03

STD #	IS/SS MIX #	ReRun?	pH <2	Comments
9111530	9111515		—	↑ OK Sample.
	9110871		—	
			—	
			—	ML
			—	↓
			—	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
		✓	X	SURR OUT
		✓	X	recal source cleaned
		✓	X	
		✓	X	
		✓	X	* No Avail QC

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-10

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
11/22/09		ND	S1055	RK91904-CAL7	QC	5mL	7	1
			S1056	-CAL A				1
			S1057	-CAL B				1
			S1058	-CAL C				1
			S1059	-BLK				1
				RS 11/23/09				
11/23/09	1427	RT	S1060	RK91904-TUN1	—	1mL	—	—
	—		S1061	RK91904-CAL1	ICAL	5mL		—
	1515		S1062	-CAL1				—
	1539		S1063	-CAL2				—
	1604		S1064	-CAL3				—
	1628		S1065	-CAL4				—
	1652		S1066	-CAL5				—
	1717		S1067	-CAL6				—
	—		S1068	IBLK	—			—
	—		S1069	IBLK-SOA				7
	1830		S1070	TBLKSCV1				
	—		S1071	(NA) -CAL7				
	1943		S1072	-CAL7				
	2007		S1073	-CAL8				
	2032		S1074	-CAL7				
	2056		S1075	-CAL8R				
	2120		S1076	-CAL8				
	2145		S1077	-CAL C				

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-10

STD #	IS/SS MIX #	Reanal?	pH <2	Comments
= 9111196	9110147			
= 9111199	9110790			
= 9111202				UG.
= 9111204				
				See maintenance logbook 11/23/09
9110192				PITS
9111187	9110147			
↓	9110790			
9111188				
9111189				
9111190				
9111191				
9111192				
9111127				
9111193				
↓				
9111194				
9111196				
9111199				
9111202				
9111204				

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GC/MS VOLATILE INJECTION LOG

Logbook # AG9-06-10

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
11/24/09	0352	MD	S1088	RSK0821-02	K0821	5mL	7	1
	0416		S1089	03				1
	0441		S1090	04				1
	0505		S1091	05				1
	0529		S1092	06				1
	0554		S1093	07				1
	0618		S1094	08				1
	0643		S1095	09				1
	0707		S1096	10				1
	0732		S1097	11				1
11/24/09	0905	DMC	S1098	RK92405-TUN	QC	1mL	7	
	0935		S1099	-CCV1		5mL		
	1010		S1100	9K24017-BS1				
	1035		01	RK92405-CCV2				
	1059		02	-BLK				
	1124		03	9K24017-BLK1				
	1213		04	RSK0821-06 REI	K0821			2
	1237		05	RSK0591-01	K0591			2000
	1302		06	-02				1000
	1326		07	-03				250
	1351		08	-BLK-				
	1415		09	RSK0792-01	K0792			1
	1439		10	02				1
	1504		11	03				1
	1528		12	04				1
	1553		13	05				1
	1617		14	RSK0825-01	K0825			1
	1642		15	02				1
	1706		16	03				1
	1730		17	04				1
	1755		18	RSK0991-01	K0991			1
	1819		19	02				1
	1844		20	03				1
	1908		21	04				1
	1932		22	05				1
	1956		23	06				1
	2021		24	08				1
	2046		25	RSK0843-01	K0843			1

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GC/MS VOLATILE INJECTION LOG

Logbook # AG9-06-10

STD #	IS/SS MIX #	Re-Run?	RT <2	Comments
	9110147		X	
	9110790		X	
			X	
			X	
		Y	X	REI @2X
			X	
			X	
			X	
			X	
			X	
9110192				DASC
9111358	9110147			8260 (R9K2009)
9111359 (Full primary)	9110790			
9111360				Add (R9K2009-ALL)
			X	
				Nasty oils.
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
		Y	~~7~~ 5.7	REI @5X
		Y	~~6~~ 4.6	REI @4X
		Y	X	REI @10X
		Y	X	REI @8X
			X	
			X	

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-10

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
11/24/09	2110	DHC	31126	RSK0843 -02 (NC)	K0843	5mL	—	1
11/25/09	0906	DHC	31127	RLK92506 -TUNE	QC	1mL		—
	0950		28829	-CCV1		5mL		—
	1020		29309	9K25014 -BS1				—
	1044		30311	RLK92506 -CCV2				—
	1122		31312	-IBLK				—
	1151		32313	9K25014 -DLK1				—
	1219		33314	RSK0991 -01 REI	K0991			5
	1243		34315	03 REI				4
	1307		35316	05 REI				10
	1332		36317	06 REI				8
	1356		38	RSK0843-02	K0843			1
	1421		39	RSK0887 -01	K0887			1
	1445		40	02				1
	1510		41	03				1
	1534		42	04				1
	1559		43	05				1
	1624		44	06				1
	1648		45	07				1
	1713		46	08				1
	1737		47	09				1
	1802		48	10				1
	1826		49	11				1
	1850		50	12				1
	1915		51	RSK0867 -01	K0867			1
	1940		52	02				1
	2004		53	03				1
	2028		54	04				1
	2053		55	RSK0898 -01	K0898			1
	2117		56	02				1

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-10

STD #	IS/SS MIX #	ReRun?	pH <2	Comments
	9110147/9110190	Y	X	outside 12hr
9110192				PASS
9111358	9110147			8260(R9K2009)
9111359 (Full Pri.)	9110190			
9111360				Add(R9K2009-Add)
			~7	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
			X	
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			X	
			X	
			X	
			X	
			X	
			X	
			X	

REVIEWED BY_____ PAGE 000070

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Analytical Report

Work Order: RSL0187

Project Description
LMC - Utica, NY

For:

Jeff Bonsteel
ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Candace L. Fox

Candace Fox
Project Manager
candace.fox@testamericainc.com
Wednesday, December 30, 2009

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exception to NELAP requirements are noted in this report. Persuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project manager who has signed this report.

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

TestAmerica Buffalo
Current Certifications

As of 1/27/2009

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

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CASE NARRATIVE

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. field-pH), they were not analyzed immediately, but as soon as possible after laboratory receipt.

A pertinent document is appended to this report, 1 page, is included and is an integral part of this report.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the samples tested as received by our Laboratory.

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

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DATA QUALIFIERS AND DEFINITIONS

D03	Dilution required due to excessive foaming
J	Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.
L5	Analyte recovery outside of specified criteria. Individual analyte criteria exceedences allowed for multi-component analyses without disqualification of data per NELAC Standard, DOD QSM and/or AFCEE QAPP.
NR	Any inclusion of NR indicates that the project specific requirements do not require reporting estimated values below the laboratory reporting limit.

ADDITIONAL COMMENTS

Results are reported on a wet weight basis unless otherwise noted.

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
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Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Executive Summary - Detections

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-01 (DUP-113009 - Water)						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
cis-1,2-Dichloroethene	**0.68**	J	1.0	0.38	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
trans-1,2-Dichloroethene	**0.74**	J	1.0	0.42	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Sample ID: RSL0187-03 (PZ-18 - Water)						**Sampled: 11/30/09 16:53**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
Acetone	**2.2**	J	5.0	1.3	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
cis-1,2-Dichloroethene	**0.82**	J	1.0	0.38	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
trans-1,2-Dichloroethene	**0.83**	J	1.0	0.42	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Sample ID: RSL0187-04 (PZ-19 - Water)						**Sampled: 11/30/09 18:31**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
Acetone	**3.7**	J	5.0	1.3	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Tetrachloroethene	**0.59**	J	1.0	0.36	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Sample Summary

Sample Identification	Lab Number	Client Matrix	Date/Time Sampled	Date/Time Received	Sample Qualifiers
DUP-113009	RSL0187-01	Water	11/30/09	12/02/09 10:30	
PZ-17	RSL0187-02	Water	11/30/09 18:11	12/02/09 10:30	
PZ-18	RSL0187-03	Water	11/30/09 16:53	12/02/09 10:30	
PZ-19	RSL0187-04	Water	11/30/09 18:31	12/02/09 10:30	
PZ-20	RSL0187-05	Water	11/30/09 17:36	12/02/09 10:30	
TRIP BLANK	RSL0187-06	Water	11/30/09	12/02/09 10:30	

ARCADIS U.S., Inc. - Albany, NY
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Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-01 (DUP-113009 - Water)						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
cis-1,2-Dichloroethene	**0.68**	J	1.0	0.38	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
trans-1,2-Dichloroethene	**0.74**	J	1.0	0.42	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B

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Project: LMC - Utica, NY
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Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-01 (DUP-113009 - Water) - cont.						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichloroethane-d4	*99 %*		*Surr Limits: (66-137%)*				*12/03/09 16:00*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*97 %*		*Surr Limits: (73-120%)*				*12/03/09 16:00*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*		*Surr Limits: (71-126%)*				*12/03/09 16:00*	*LH*	*9L03027*	*8260B*

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Reported: 12/04/09 15:06

Analytical Report

Sample ID: RSL0187-02 (PZ-17 - Water) **Sampled: 11/30/09 18:11** **Recvd: 12/02/09 10:30**

Volatile Organic Compounds by EPA 8260B

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
1,1,1-Trichloroethane	ND	D03	5.0	1.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND	D03	5.0	1.1	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1,2-Trichloroethane	ND	D03	5.0	1.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	D03	5.0	1.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1-Dichloroethane	ND	D03	5.0	1.9	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1-Dichloroethene	ND	D03	5.0	1.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dibromoethane	ND	D03	5.0	0.83	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichlorobenzene	ND	D03	5.0	1.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichloroethane	ND	D03	5.0	1.1	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichloropropane	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,3-Dichlorobenzene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,4-Dichlorobenzene	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
2-Butanone	ND	D03	25	6.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
2-Hexanone	ND	D03	25	6.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
4-Methyl-2-pentanone	ND	D03	25	4.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Acetone	ND	D03	25	6.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Benzene	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Bromodichloromethane	ND	D03	5.0	1.9	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Bromoform	ND	D03	5.0	1.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Bromomethane	ND	D03	5.0	1.4	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Carbon disulfide	ND	D03	5.0	0.97	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Carbon Tetrachloride	ND	D03	5.0	1.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chlorobenzene	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Dibromochloromethane	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chloroethane	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chloroform	ND	D03	5.0	1.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chloromethane	ND	D03	5.0	1.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND	D03	5.0	1.9	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Cyclohexane	ND	D03	5.0	2.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Dichlorodifluoromethane	ND	D03	5.0	1.4	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Ethylbenzene	ND	D03	5.0	0.92	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Isopropylbenzene	ND	D03	5.0	0.96	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methyl Acetate	ND	D03	5.0	2.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND	D03	5.0	0.80	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methylcyclohexane	ND	D03	5.0	2.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methylene Chloride	ND	D03	5.0	2.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Styrene	ND	D03	5.0	0.92	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Tetrachloroethene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Toluene	ND	D03	5.0	2.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND	D03	5.0	2.1	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Trichloroethene	ND	D03	5.0	2.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Trichlorofluoromethane	ND	D03	5.0	0.76	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Vinyl chloride	ND	D03	5.0	1.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B

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Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-02 (PZ-17 - Water) - cont.							**Sampled: 11/30/09 18:11**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND	D03	10	3.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichloroethane-d4	*100 %*	*D03*	*Surr Limits:*	*(66-137%)*			*12/03/09 16:24*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*95 %*	*D03*	*Surr Limits:*	*(73-120%)*			*12/03/09 16:24*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*	*D03*	*Surr Limits:*	*(71-126%)*			*12/03/09 16:24*	*LH*	*9L03027*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Sample ID: RSL0187-03 (PZ-18 - Water) **Sampled: 11/30/09 16:53** **Recvd: 12/02/09 10:30**

Volatile Organic Compounds by EPA 8260B

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Acetone	**2.2**	J	5.0	1.3	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
cis-1,2-Dichloroethene	**0.82**	J	1.0	0.38	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
trans-1,2-Dichloroethene	**0.83**	J	1.0	0.42	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-03 (PZ-18 - Water) - cont.							**Sampled: 11/30/09 16:53**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichloroethane-d4	*100 %*		*Surr Limits: (66-137%)*				*12/03/09 16:48*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*96 %*		*Surr Limits: (73-120%)*				*12/03/09 16:48*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*		*Surr Limits: (71-126%)*				*12/03/09 16:48*	*LH*	*9L03027*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
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Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Sample ID: RSL0187-04 (PZ-19 - Water) **Sampled: 11/30/09 18:31** **Recvd: 12/02/09 10:30**

Volatile Organic Compounds by EPA 8260B

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Acetone	**3.7**	J	5.0	1.3	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Tetrachloroethene	**0.59**	J	1.0	0.36	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
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Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-04 (PZ-19 - Water) - cont.							**Sampled: 11/30/09 18:31**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichloroethane-d4	*100 %*		*Surr Limits: (66-137%)*				*12/03/09 17:12*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*95 %*		*Surr Limits: (73-120%)*				*12/03/09 17:12*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*		*Surr Limits: (71-126%)*				*12/03/09 17:12*	*LH*	*9L03027*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Sample ID: RSL0187-05 (PZ-20 - Water) **Sampled: 11/30/09 17:36** **Recvd: 12/02/09 10:30**

Volatile Organic Compounds by EPA 8260B

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-05 (PZ-20 - Water) - cont.							**Sampled: 11/30/09 17:36**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichloroethane-d4	*99 %*		*Surr Limits: (66-137%)*				*12/03/09 17:36*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*95 %*		*Surr Limits: (73-120%)*				*12/03/09 17:36*	*LH*	*9L03027*	*8260B*
Toluene-d8	*95 %*		*Surr Limits: (71-126%)*				*12/03/09 17:36*	*LH*	*9L03027*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-06 (TRIP BLANK - Water)						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-06 (TRIP BLANK - Water) - cont.						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichloroethane-d4	*99 %*		*Surr Limits: (66-137%)*				*12/03/09 18:00*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*96 %*		*Surr Limits: (73-120%)*				*12/03/09 18:00*	*LH*	*9L03027*	*8260B*
Toluene-d8	*97 %*		*Surr Limits: (71-126%)*				*12/03/09 18:00*	*LH*	*9L03027*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
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Reported: 12/04/09 15:06

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracte	Units	Extract Volume	Units	Date Prepared	Lab Tech	Extraction Method
Volatile Organic Compounds by EPA 8260B									
8260B	9L03027	RSL0187-01	5.00	mL	5.00	mL	12/03/09 11:54	LCH	5030B MS
8260B	9L03027	RSL0187-02	5.00	mL	5.00	mL	12/03/09 11:54	LCH	5030B MS
8260B	9L03027	RSL0187-03	5.00	mL	5.00	mL	12/03/09 11:54	LCH	5030B MS
8260B	9L03027	RSL0187-04	5.00	mL	5.00	mL	12/03/09 11:54	LCH	5030B MS
8260B	9L03027	RSL0187-05	5.00	mL	5.00	mL	12/03/09 11:54	LCH	5030B MS
8260B	9L03027	RSL0187-06	5.00	mL	5.00	mL	12/03/09 11:54	LCH	5030B MS

ARCADIS U.S., Inc. - Albany, NY
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Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 12/03/09 (Lab Number:9L03027-BLK1, Batch: 9L03027)											
1,1,1-Trichloroethane			1.0	0.26	ug/L	ND					
1,1,2,2-Tetrachloroethane			1.0	0.21	ug/L	ND					
1,1,2-Trichloroethane			1.0	0.23	ug/L	ND					
1,1,2-Trichloro-1,2,2-trifluoroethane			1.0	0.31	ug/L	ND					
1,1-Dichloroethane			1.0	0.38	ug/L	ND					
1,1-Dichloroethene			1.0	0.29	ug/L	ND					
1,2,4-Trichlorobenzene			1.0	0.41	ug/L	ND					
1,2-Dibromo-3-chloropropane			1.0	0.39	ug/L	ND					
1,2-Dibromoethane			1.0	0.17	ug/L	ND					
1,2-Dichlorobenzene			1.0	0.20	ug/L	ND					
1,2-Dichloroethane			1.0	0.21	ug/L	ND					
1,2-Dichloropropane			1.0	0.32	ug/L	ND					
1,3-Dichlorobenzene			1.0	0.36	ug/L	ND					
1,4-Dichlorobenzene			1.0	0.39	ug/L	ND					
2-Butanone			5.0	1.3	ug/L	ND					
2-Hexanone			5.0	1.2	ug/L	ND					
4-Methyl-2-pentanone			5.0	0.91	ug/L	ND					
Acetone			5.0	1.3	ug/L	ND					
Benzene			1.0	0.41	ug/L	ND					
Bromodichloromethane			1.0	0.39	ug/L	ND					
Bromoform			1.0	0.26	ug/L	ND					
Bromomethane			1.0	0.28	ug/L	ND					
Carbon disulfide			1.0	0.19	ug/L	ND					
Carbon Tetrachloride			1.0	0.27	ug/L	ND					
Chlorobenzene			1.0	0.32	ug/L	ND					
Dibromochloromethane			1.0	0.32	ug/L	ND					
Chloroethane			1.0	0.32	ug/L	ND					
Chloroform			1.0	0.34	ug/L	ND					
Chloromethane			1.0	0.35	ug/L	ND					
cis-1,2-Dichloroethene			1.0	0.38	ug/L	ND					
cis-1,3-Dichloropropene			1.0	0.36	ug/L	ND					
Cyclohexane			1.0	0.53	ug/L	ND					
Dichlorodifluoromethane			1.0	0.29	ug/L	ND					
Ethylbenzene			1.0	0.18	ug/L	ND					
Isopropylbenzene			1.0	0.19	ug/L	ND					
Methyl Acetate			1.0	0.50	ug/L	ND					

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
Blank Analyzed: 12/03/09 (Lab Number:9L03027-BLK1, Batch: 9L03027)											
Methyl-t-Butyl Ether (MTBE)			1.0	0.16	ug/L	ND					
Methylcyclohexane			1.0	0.50	ug/L	ND					
Methylene Chloride			1.0	0.44	ug/L	ND					
Styrene			1.0	0.18	ug/L	ND					
Tetrachloroethene			1.0	0.36	ug/L	ND					
Toluene			1.0	0.51	ug/L	ND					
trans-1,2-Dichloroethene			1.0	0.42	ug/L	ND					
trans-1,3-Dichloropropene			1.0	0.37	ug/L	ND					
Trichloroethene			1.0	0.46	ug/L	ND					
Trichlorofluoromethane			1.0	0.15	ug/L	ND					
Vinyl chloride			1.0	0.24	ug/L	ND					
Xylenes, total			2.0	0.66	ug/L	ND					
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*95*	*66-137*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*97*	*73-120*			
Surrogate: Toluene-d8					*ug/L*		*99*	*71-126*			
LCS Analyzed: 12/03/09 (Lab Number:9L03027-BS1, Batch: 9L03027)											
1,1,1-Trichloroethane		25.0	1.0	0.26	ug/L	22.9	92	73-126			
1,1,2,2-Tetrachloroethane		25.0	1.0	0.21	ug/L	25.8	103	70-126			
1,1,2-Trichloroethane		25.0	1.0	0.23	ug/L	25.2	101	76-122			
1,1,2-Trichloro-1,2,2-trifluoroethane		25.0	1.0	0.31	ug/L	28.3	113	60-140			
1,1-Dichloroethane		25.0	1.0	0.38	ug/L	25.0	100	71-129			
1,1-Dichloroethene		25.0	1.0	0.29	ug/L	26.0	104	65-138			
1,2,4-Trichlorobenzene		25.0	1.0	0.41	ug/L	25.0	100	70-122			
1,2-Dibromo-3-chloropropane		25.0	1.0	0.39	ug/L	18.8	75	56-134			
1,2-Dibromoethane		25.0	1.0	0.17	ug/L	25.6	102	77-120			
1,2-Dichlorobenzene		25.0	1.0	0.20	ug/L	24.4	98	77-120			
1,2-Dichloroethane		25.0	1.0	0.21	ug/L	24.6	98	75-127			
1,2-Dichloropropane		25.0	1.0	0.32	ug/L	24.6	98	76-120			
1,3-Dichlorobenzene		25.0	1.0	0.36	ug/L	24.0	96	77-120			
1,4-Dichlorobenzene		25.0	1.0	0.39	ug/L	23.9	96	75-120			
2-Butanone		125	5.0	1.3	ug/L	127	101	57-140			
2-Hexanone		125	5.0	1.2	ug/L	131	105	65-127			
4-Methyl-2-pentanone		125	5.0	0.91	ug/L	129	103	71-125			
Acetone		125	5.0	1.3	ug/L	136	109	56-142			

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

LABORATORY QC DATA

Analyte	Source Result	Spike Level	RL	MDL	Units	Result	% REC	% REC Limits	% RPD	RPD Limit	Data Qualifiers
Volatile Organic Compounds by EPA 8260B											
LCS Analyzed: 12/03/09 (Lab Number:9L03027-BS1, Batch: 9L03027)											
Benzene		25.0	1.0	0.41	ug/L	24.8	99	71-124			
Bromodichloromethane		25.0	1.0	0.39	ug/L	19.7	79	80-122			L5
Bromoform		25.0	1.0	0.26	ug/L	25.7	103	66-128			
Bromomethane		25.0	1.0	0.28	ug/L	26.2	105	36-150			
Carbon disulfide		25.0	1.0	0.19	ug/L	28.9	116	59-134			
Carbon Tetrachloride		25.0	1.0	0.27	ug/L	28.6	114	72-134			
Chlorobenzene		25.0	1.0	0.32	ug/L	24.6	98	72-120			
Dibromochloromethane		25.0	1.0	0.32	ug/L	24.4	98	75-125			
Chloroethane		25.0	1.0	0.32	ug/L	28.3	113	69-136			
Chloroform		25.0	1.0	0.34	ug/L	25.1	100	73-127			
Chloromethane		25.0	1.0	0.35	ug/L	25.4	102	49-142			
cis-1,2-Dichloroethene		25.0	1.0	0.38	ug/L	25.1	100	74-124			
cis-1,3-Dichloropropene		25.0	1.0	0.36	ug/L	20.2	81	74-124			
Cyclohexane		25.0	1.0	0.53	ug/L	27.0	108	70-130			
Dichlorodifluoromethane		25.0	1.0	0.29	ug/L	28.4	113	33-157			
Ethylbenzene		25.0	1.0	0.18	ug/L	24.8	99	77-123			
Isopropylbenzene		25.0	1.0	0.19	ug/L	25.3	101	77-122			
Methyl Acetate		25.0	1.0	0.50	ug/L	25.5	102	60-140			
Methyl-t-Butyl Ether (MTBE)		25.0	1.0	0.16	ug/L	25.1	100	64-127			
Methylcyclohexane		25.0	1.0	0.50	ug/L	27.5	110	60-140			
Methylene Chloride		25.0	1.0	0.44	ug/L	23.4	93	57-132			
Styrene		25.0	1.0	0.18	ug/L	25.1	100	70-130			
Tetrachloroethene		25.0	1.0	0.36	ug/L	25.3	101	74-122			
Toluene		25.0	1.0	0.51	ug/L	24.2	97	70-122			
trans-1,2-Dichloroethene		25.0	1.0	0.42	ug/L	25.1	100	73-127			
trans-1,3-Dichloropropene		25.0	1.0	0.37	ug/L	20.3	81	72-123			
Trichloroethene		25.0	1.0	0.46	ug/L	24.4	98	74-123			
Trichlorofluoromethane		25.0	1.0	0.15	ug/L	26.2	105	62-152			
Vinyl chloride		25.0	1.0	0.24	ug/L	25.0	100	65-133			
Xylenes, total		75.0	2.0	0.66	ug/L	75.8	101	76-122			
Surrogate: 1,2-Dichloroethane-d4					*ug/L*		*95*	*66-137*			
Surrogate: 4-Bromofluorobenzene					*ug/L*		*98*	*73-120*			
Surrogate: Toluene-d8					*ug/L*		*101*	*71-126*			

TestAmerica Buffalo
SDG:
CLASS: VOA
METHOD: 8260B

ANALYSES DATA PACKAGE COVER PAGE

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis, Geraghty & Miller - NY9A8463

Client Sample Id:	Lab Sample Id:
DUP-113009	RSL0187-01
PZ-17	RSL0187-02
PZ-18	RSL0187-03
PZ-19	RSL0187-04
PZ-20	RSL0187-05
TRIP BLANK	RSL0187-06

Form 2
SURROGATE STANDARD RECOVERY AND RT SUMMARY
8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Sequence:	RL90313	Instrument:	HP5975T
Matrix:	Water	Calibration:	R9L0204

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
Blank (9L03027-BLK1)			Lab File ID: T6637.D		Analyzed: 12/03/09 13:54			
1,2-Dichloroethane-d4	25.0	95	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	97	73 - 120	8.91	8.903333	0.0067	+/-1.0	
Toluene-d8	25.0	99	71 - 126	6.81	6.811667	-0.0017	+/-1.0	
LCS (9L03027-BS1)			Lab File ID: T6636.D		Analyzed: 12/03/09 13:15			
1,2-Dichloroethane-d4	25.0	95	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	98	73 - 120	8.9	8.903333	-0.0033	+/-1.0	
Toluene-d8	25.0	101	71 - 126	6.81	6.811667	-0.0017	+/-1.0	
DUP-113009 (RSL0187-01)			Lab File ID: T6642.D		Analyzed: 12/03/09 16:00			
1,2-Dichloroethane-d4	25.0	99	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	97	73 - 120	8.9	8.903333	-0.0033	+/-1.0	
Toluene-d8	25.0	98	71 - 126	6.81	6.811667	-0.0017	+/-1.0	
PZ-17 (RSL0187-02)			Lab File ID: T6643.D		Analyzed: 12/03/09 16:24			
1,2-Dichloroethane-d4	25.0	100	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	95	73 - 120	8.9	8.903333	-0.0033	+/-1.0	
Toluene-d8	25.0	98	71 - 126	6.81	6.811667	-0.0017	+/-1.0	
PZ-18 (RSL0187-03)			Lab File ID: T6644.D		Analyzed: 12/03/09 16:48			
1,2-Dichloroethane-d4	25.0	100	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	96	73 - 120	8.9	8.903333	-0.0033	+/-1.0	
Toluene-d8	25.0	98	71 - 126	6.81	6.811667	-0.0017	+/-1.0	
PZ-19 (RSL0187-04)			Lab File ID: T6645.D		Analyzed: 12/03/09 17:12			
1,2-Dichloroethane-d4	25.0	100	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	95	73 - 120	8.9	8.903333	-0.0033	+/-1.0	
Toluene-d8	25.0	98	71 - 126	6.81	6.811667	-0.0017	+/-1.0	
PZ-20 (RSL0187-05)			Lab File ID: T6646.D		Analyzed: 12/03/09 17:36			
1,2-Dichloroethane-d4	25.0	99	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	95	73 - 120	8.9	8.903333	-0.0033	+/-1.0	
Toluene-d8	25.0	95	71 - 126	6.81	6.811667	-0.0017	+/-1.0	
TRIP BLANK (RSL0187-06)			Lab File ID: T6647.D		Analyzed: 12/03/09 18:00			
1,2-Dichloroethane-d4	25.0	99	66 - 137	5.38	5.381667	-0.0017	+/-1.0	
4-Bromofluorobenzene	25.0	96	73 - 120	8.9	8.903333	-0.0033	+/-1.0	
Toluene-d8	25.0	97	71 - 126	6.81	6.811667	-0.0017	+/-1.0	

Form 3

LCS / LCS DUPLICATE RECOVERY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Matrix:	Water	Spike standard:	9120112
Batch:	9L03027	Laboratory ID:	9L03027-BS1
Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
1,1,1-Trichloroethane	25.0	ug/L	22.9	92	73 - 126
1,1,2,2-Tetrachloroethane	25.0	ug/L	25.8	103	70 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	ug/L	28.3	113	60 - 140
1,1,2-Trichloroethane	25.0	ug/L	25.2	101	76 - 122
1,1-Dichloroethane	25.0	ug/L	25.0	100	71 - 129
1,1-Dichloroethene	25.0	ug/L	26.0	104	65 - 138
1,2,4-Trichlorobenzene	25.0	ug/L	25.0	100	70 - 122
1,2-Dibromo-3-chloropropane	25.0	ug/L	18.8	75	56 - 134
1,2-Dibromoethane	25.0	ug/L	25.6	102	77 - 120
1,2-Dichlorobenzene	25.0	ug/L	24.4	98	77 - 120
1,2-Dichloroethane	25.0	ug/L	24.6	98	75 - 127
1,2-Dichloropropane	25.0	ug/L	24.6	98	76 - 120
1,3-Dichlorobenzene	25.0	ug/L	24.0	96	77 - 120
1,4-Dichlorobenzene	25.0	ug/L	23.9	96	75 - 120
2-Butanone	125	ug/L	127	101	57 - 140
2-Hexanone	125	ug/L	131	105	65 - 127
4-Methyl-2-pentanone	125	ug/L	129	103	71 - 125
Acetone	125	ug/L	136	109	56 - 142
Benzene	25.0	ug/L	24.8	99	71 - 124
Bromodichloromethane	25.0	ug/L	19.7	79 *	80 - 122
Bromoform	25.0	ug/L	25.7	103	66 - 128
Bromomethane	25.0	ug/L	26.2	105	36 - 150
Carbon disulfide	25.0	ug/L	28.9	116	59 - 134
Carbon Tetrachloride	25.0	ug/L	28.6	114	72 - 134
Chlorobenzene	25.0	ug/L	24.6	98	72 - 120
Chloroethane	25.0	ug/L	28.3	113	69 - 136
Chloroform	25.0	ug/L	25.1	100	73 - 127
Chloromethane	25.0	ug/L	25.4	102	49 - 142
cis-1,2-Dichloroethene	25.0	ug/L	25.1	100	74 - 124
cis-1,3-Dichloropropene	25.0	ug/L	20.2	81	74 - 124

Form 3

LCS / LCS DUPLICATE RECOVERY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Matrix:	Water	Spike standard:	9120112
Batch:	9L03027	Laboratory ID:	9L03027-BS1
Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED	UNITS	LCS CONCENTRATION	LCS % REC. #	QCLIMITS REC.
Cyclohexane	25.0	ug/L	27.0	108	70 - 130
Dibromochloromethane	25.0	ug/L	24.4	98	75 - 125
Dichlorodifluoromethane	25.0	ug/L	28.4	113	33 - 157
Ethylbenzene	25.0	ug/L	24.8	99	77 - 123
Isopropylbenzene	25.0	ug/L	25.3	101	77 - 122
Methyl Acetate	25.0	ug/L	25.5	102	60 - 140
Methylcyclohexane	25.0	ug/L	27.5	110	60 - 140
Methylene Chloride	25.0	ug/L	23.4	93	57 - 132
Methyl-t-Butyl Ether (MTBE)	25.0	ug/L	25.1	100	64 - 127
Styrene	25.0	ug/L	25.1	100	70 - 130
Tetrachloroethene	25.0	ug/L	25.3	101	74 - 122
Toluene	25.0	ug/L	24.2	97	70 - 122
trans-1,2-Dichloroethene	25.0	ug/L	25.1	100	73 - 127
trans-1,3-Dichloropropene	25.0	ug/L	20.3	81	72 - 123
Trichloroethene	25.0	ug/L	24.4	98	74 - 123
Trichlorofluoromethane	25.0	ug/L	26.2	105	62 - 152
Vinyl chloride	25.0	ug/L	25.0	100	65 - 133
Xylenes, total	75.0	ug/L	75.8	101	76 - 122

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

PREPARATION BATCH SUMMARY

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis, Geraghty & Miller - NY9A8463

Batch: 9L03027 Batch Matrix: Water

Preparation: 5030B MS

SAMPLE NAME	LAB SAMPLE ID	INITIAL	FINAL	DATE PREPARED	TOT/DIS
Blank	9L03027-BLK1	5.00 mL	5.00 mL	12/03/09 11:54	N/A
LCS	9L03027-BS1	5.00 mL	5.00 mL	12/03/09 11:54	N/A
DUP-113009	RSL0187-01	5.00 mL	5.00 mL	12/03/09 11:54	N/A
PZ-17	RSL0187-02	5.00 mL	5.00 mL	12/03/09 11:54	N/A
PZ-18	RSL0187-03	5.00 mL	5.00 mL	12/03/09 11:54	N/A
PZ-19	RSL0187-04	5.00 mL	5.00 mL	12/03/09 11:54	N/A
PZ-20	RSL0187-05	5.00 mL	5.00 mL	12/03/09 11:54	N/A
TRIP BLANK	RSL0187-06	5.00 mL	5.00 mL	12/03/09 11:54	N/A

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Lab File ID:	T6616.D	Injection Date:	12/02/09
Instrument ID:	HP5975T	Injection Time:	23:55
Sequence:	RL90211	Lab Sample ID:	RL90211-TUN1
Calibration:	R9L0204		

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	25.457	PASS
75	30 - 60% of 95	49.093	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.6027	PASS
173	Less than 2% of 174	0.23732	PASS
174	50 - 100% of 95	75.497	PASS
175	5 - 9% of 174	7.1331	PASS
176	95 - 101% of 174	95.376	PASS
177	5 - 9% of 176	6.2789	PASS

INITIAL CALIBRATION STANDARDS

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Sequence:	RL90211	Instrument:	HP5975T
Calibration:	R9L0204		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
9110192	BFB Working Standard	RL90211-TUN1	T6616.D	12/02/09 23:55
9120146	T CAL1 MIX 1 PPB	RL90211-CAL1	T6618.D	12/03/09 00:41
9120147	T CAL2 MIX 5 PPB	RL90211-CAL2	T6619.D	12/03/09 01:05
9120148	T CAL3 MIX 10 PPB	RL90211-CAL3	T6620.D	12/03/09 01:29
9120149	T CAL4 MIX 25 PPB	RL90211-CAL4	T6621.D	12/03/09 01:53
9120150	T CAL5 MIX 50 PPB	RL90211-CAL5	T6622.D	12/03/09 02:17
9120151	T CAL6 MIX 100 PPB	RL90211-CAL6	T6623.D	12/03/09 02:41

Form 5

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Lab File ID:	T6634.D	Injection Date:	12/03/09
Instrument ID:	HP5975T	Injection Time:	12:19
Sequence:	RL90313	Lab Sample ID:	RL90313-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	27.915	PASS
75	30 - 60% of 95	50.483	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.231	PASS
173	Less than 2% of 174	0.51236	PASS
174	50 - 100% of 95	77.412	PASS
175	5 - 9% of 174	7.5741	PASS
176	95 - 101% of 174	99.246	PASS
177	5 - 9% of 176	6.1625	PASS

Form 5A

ANALYSIS BATCH (SEQUENCE) SUMMARY

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Sequence:	RL90313	Instrument:	HP5975T
		Calibration:	R9L0204

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	RL90313-TUN1	T6634.D	12/03/09 12:19
Calibration Check	RL90313-CCV1	T6635.D	12/03/09 12:41
LCS	9L03027-BS1	T6636.D	12/03/09 13:15
Blank	9L03027-BLK1	T6637.D	12/03/09 13:54
DUP-113009	RSL0187-01	T6642.D	12/03/09 16:00
PZ-17	RSL0187-02	T6643.D	12/03/09 16:24
PZ-18	RSL0187-03	T6644.D	12/03/09 16:48
PZ-19	RSL0187-04	T6645.D	12/03/09 17:12
PZ-20	RSL0187-05	T6646.D	12/03/09 17:36
TRIP BLANK	RSL0187-06	T6647.D	12/03/09 18:00

Form 8

INTERNAL STANDARD AREA AND RT SUMMARY

8260B

Laboratory: TestAmerica Buffalo
SDG:
Client: ARCADIS U.S., Inc. - Albany, NY
Project: Arcadis, Geraghty & Miller - NY9A8463
Sequence: RL90313
Instrument: HP5975T
Matrix: ~~Solid~~ Water DLY 12/30/09
Calibration: R9L0204

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (RL90313-CCV1)			Lab File ID: T6635.D			Analyzed: 12/03/09 12:41			
1,4-Dichlorobenzene-d4	348104	9.87				50 - 200		+/-0.50	
1,4-Difluorobenzene	809705	5.69				50 - 200		+/-0.50	
Chlorobenzene-d5	652545	7.96				50 - 200		+/-0.50	
LCS (9L03027-BS1)			Lab File ID: T6636.D			Analyzed: 12/03/09 13:15			
1,4-Dichlorobenzene-d4	323794	9.87	348104	9.87	93	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	741929	5.69	809705	5.69	92	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	596713	7.96	652545	7.96	91	50 - 200	0.0000	+/-0.50	
Blank (9L03027-BLK1)			Lab File ID: T6637.D			Analyzed: 12/03/09 13:54			
1,4-Dichlorobenzene-d4	277160	9.87	348104	9.87	80	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	682444	5.69	809705	5.69	84	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	535208	7.96	652545	7.96	82	50 - 200	0.0000	+/-0.50	
DUP-113009 (RSL0187-01)			Lab File ID: T6642.D			Analyzed: 12/03/09 16:00			
1,4-Dichlorobenzene-d4	243412	9.87	348104	9.87	70	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	592083	5.69	809705	5.69	73	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	457978	7.96	652545	7.96	70	50 - 200	0.0000	+/-0.50	
PZ-17 (RSL0187-02)			Lab File ID: T6643.D			Analyzed: 12/03/09 16:24			
1,4-Dichlorobenzene-d4	228297	9.87	348104	9.87	66	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	568745	5.69	809705	5.69	70	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	437673	7.96	652545	7.96	67	50 - 200	0.0000	+/-0.50	
PZ-18 (RSL0187-03)			Lab File ID: T6644.D			Analyzed: 12/03/09 16:48			
1,4-Dichlorobenzene-d4	231834	9.87	348104	9.87	67	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	571073	5.69	809705	5.69	71	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	432056	7.96	652545	7.96	66	50 - 200	0.0000	+/-0.50	
PZ-19 (RSL0187-04)			Lab File ID: T6645.D			Analyzed: 12/03/09 17:12			
1,4-Dichlorobenzene-d4	225485	9.87	348104	9.87	65	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	560057	5.69	809705	5.69	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	429584	7.96	652545	7.96	66	50 - 200	0.0000	+/-0.50	
PZ-20 (RSL0187-05)			Lab File ID: T6646.D			Analyzed: 12/03/09 17:36			
1,4-Dichlorobenzene-d4	226397	9.87	348104	9.87	65	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	556374	5.69	809705	5.69	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	421723	7.96	652545	7.96	65	50 - 200	0.0000	+/-0.50	
TRIP BLANK (RSL0187-06)			Lab File ID: T6647.D			Analyzed: 12/03/09 18:00			
1,4-Dichlorobenzene-d4	234298	9.87	348104	9.87	67	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	556397	5.69	809705	5.69	69	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	431314	7.96	652545	7.96	66	50 - 200	0.0000	+/-0.50	

METHOD DETECTION AND REPORTING LIMITS

8260B

Laboratory: TestAmerica Buffalo **SDG:**

Client: ARCADIS U.S., Inc. - Albany, NY **Project:** Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water **Instrument:** HP5975T

Analyte	MDL	MRL	Units
1,1,1-Trichloroethane	0.26	1.0	ug/L
1,1,2,2-Tetrachloroethane	0.21	1.0	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	0.31	1.0	ug/L
1,1,2-Trichloroethane	0.23	1.0	ug/L
1,1-Dichloroethane	0.38	1.0	ug/L
1,1-Dichloroethene	0.29	1.0	ug/L
1,2,4-Trichlorobenzene	0.41	1.0	ug/L
1,2-Dibromo-3-chloropropane	0.39	1.0	ug/L
1,2-Dibromoethane	0.17	1.0	ug/L
1,2-Dichlorobenzene	0.20	1.0	ug/L
1,2-Dichloroethane	0.21	1.0	ug/L
1,2-Dichloropropane	0.32	1.0	ug/L
1,3-Dichlorobenzene	0.36	1.0	ug/L
1,4-Dichlorobenzene	0.39	1.0	ug/L
2-Butanone	1.3	5.0	ug/L
2-Hexanone	1.2	5.0	ug/L
4-Methyl-2-pentanone	0.91	5.0	ug/L
Acetone	1.3	5.0	ug/L
Benzene	0.41	1.0	ug/L
Bromodichloromethane	0.39	1.0	ug/L
Bromoform	0.26	1.0	ug/L
Bromomethane	0.28	1.0	ug/L
Carbon disulfide	0.19	1.0	ug/L
Carbon Tetrachloride	0.27	1.0	ug/L
Chlorobenzene	0.32	1.0	ug/L
Chloroethane	0.32	1.0	ug/L
Chloroform	0.34	1.0	ug/L
Chloromethane	0.35	1.0	ug/L
cis-1,2-Dichloroethene	0.38	1.0	ug/L
cis-1,3-Dichloropropene	0.36	1.0	ug/L
Cyclohexane	0.53	1.0	ug/L
Dibromochloromethane	0.32	1.0	ug/L
Dichlorodifluoromethane	0.29	1.0	ug/L
Ethylbenzene	0.18	1.0	ug/L
Isopropylbenzene	0.19	1.0	ug/L
Methyl Acetate	0.50	1.0	ug/L
Methylcyclohexane	0.50	1.0	ug/L
Methylene Chloride	0.44	1.0	ug/L

METHOD DETECTION AND REPORTING LIMITS

8260B

Laboratory: TestAmerica Buffalo **SDG:**

Client: ARCADIS U.S., Inc. - Albany, NY **Project:** Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water **Instrument:** HP5975T

Analyte	MDL	MRL	Units
Methyl-t-Butyl Ether (MTBE)	0.16	1.0	ug/L
Styrene	0.18	1.0	ug/L
Tetrachloroethene	0.36	1.0	ug/L
Toluene	0.51	1.0	ug/L
trans-1,2-Dichloroethene	0.42	1.0	ug/L
trans-1,3-Dichloropropene	0.37	1.0	ug/L
Trichloroethene	0.46	1.0	ug/L
Trichlorofluoromethane	0.15	1.0	ug/L
Vinyl chloride	0.24	1.0	ug/L
Xylenes, total	0.66	2.0	ug/L

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

DUP-113009

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water Laboratory ID: RSL0187-01 File ID: T6642.D

Sampled: 11/30/09 00:00 Prepared: 12/03/09 11:54 Analyzed: 12/03/09 16:00

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9L03027 Sequence: RL90313 Calibration: R9L0204 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.68	J
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
124-48-1	Dibromochloromethane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U
75-09-2	Methylene Chloride	1	1.0	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	1	1.0	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

DUP-113009

Laboratory:	TestAmerica Buffalo		SDG:		
Client:	ARCADIS U.S., Inc. - Albany, NY		Project:	Arcadis, Geraghty & Miller - NY9A8463	
Matrix:	Water	Laboratory ID:	RSL0187-01	File ID:	T6642.D
Sampled:	11/30/09 00:00	Prepared:	12/03/09 11:54	Analyzed:	12/03/09 16:00
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.74	J
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.7	99	66 - 137	
4-Bromofluorobenzene	25.0	24.2	97	73 - 120	
Toluene-d8	25.0	24.5	98	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	243412	9.87	348104	9.87	
1,4-Difluorobenzene	592083	5.69	809705	5.69	
Chlorobenzene-d5	457978	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6642.D Vial: 44
Acq On : 3 Dec 2009 16:00 Operator: LH
Sample : RSL0187-01 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:02 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

STE TWS 12/3/09

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	592083	25.00	ug/L	0.00 73.12%
43) CI20	Chlorobenzene-D5	7.96	117	457978	25.00	ug/L	0.00 70.18%
62) CI30	1,4-Dichlorobenzene-	9.87	152	243412	25.00	ug/L	0.00 69.93%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	193221	23.52	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	94.08%		
31) CS15	1,2-Dichloroethane-D	5.38	65	334412	24.73	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	98.92%		
44) CS05	Toluene-D8	6.81	98	687821	24.51	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	98.04%		
61) CS10	p-Bromofluorobenzene	8.90	174	186647	24.18	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	96.72%		

Target Compounds						Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.	
3) C010	Chloromethane	1.72	50	2129	N.D.	
4) C020	Vinyl chloride	1.85	62	1779	N.D.	
5) C015	Bromomethane	2.22	94	319	N.D.	
6) C025	Chloroethane	2.36	64	661	N.D.	
7) C275	Trichlorofluoromet	0.00	101	0	N.D.	
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030	Methylene chloride	3.65	84	248	N.D.	
10) C040	Carbon disulfide	3.36	76	804	N.D.	
11) C036	Acrolein	3.09	56	555	N.D.	
12) C038	Acrylonitrile	3.90	53	92	N.D.	
13) C035	Acetone	3.25	43	8947	N.D.	
14) C300	Acetonitrile	3.49	41	611	N.D.	
15) C276	Iodomethane	0.00	142	0	N.D.	
16) C291	1,1,2 Trichloro-1,	0.00	101	0	N.D.	
17) C962	T-butyl Methyl Eth	3.86	73	299	N.D.	
18) C057	trans-1,2-Dichloroet	3.88	96	6691	0.74 ug/L	91
19) C255	Methyl Acetate	3.56	43	837	N.D.	
20) C050	1,1-Dichloroethane	4.25	63	2205	N.D.	
21) C125	Vinyl Acetate	4.29	43	809	N.D.	
22) C051	2,2-Dichloropropan	4.70	77	2322	N.D.	
23) C056	cis-1,2-Dichloroethe	4.73	96	6879	0.68 ug/L	92
24) C272	Tetrahydrofuran	4.97	42	1275	N.D.	
25) C222	Bromochloromethane	0.00	128	0	N.D.	
26) C060	Chloroform	0.00	83	0	N.D.	
27) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.	
28) C120	Carbon tetrachlori	0.00	117	0	N.D.	
29) C116	1,1-Dichloropropen	5.23	75	219	N.D.	
32) C165	Benzene	5.41	78	742	N.D.	
33) C065	1,2-Dichloroethane	5.45	62	274	N.D.	
34) C110	2-Butanone	4.75	43	3124	N.D.	
35) C256	Cyclohexane	5.13	56	332	N.D.	
36) C150	Trichloroethene	5.90	95	1853	N.D.	
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278	Dibromomethane	0.00	93	0	N.D.	

AMS 12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6642.D Vial: 44
Acq On : 3 Dec 2009 16:00 Operator: LH
Sample : RSL0187-01 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:02 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcycolhexane	6.01	83	79	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.86	92	1667	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.72	43	408	N.D.	
50) C220	Tetrachloroethene	7.29	166	281	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	7.36	43	412	N.D.	
55) C235	Chlorobenzene	7.97	112	73	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	8.04	91	77	N.D.	
58) C246	m,p-Xylene	8.13	106	326	N.D.	
59) C247	o-Xylene	8.46	106	98	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
63) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	8.75	105	76	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	53	0	N.D.	
69) C302	n-Propylbenzene	9.15	91	74	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	9.18	105	193	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	9.55	105	837	N.D.	
75) C308	sec-Butylbenzene	9.69	105	78	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	9.78	119	87	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	10.15	91	311	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	11.77	128	914	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

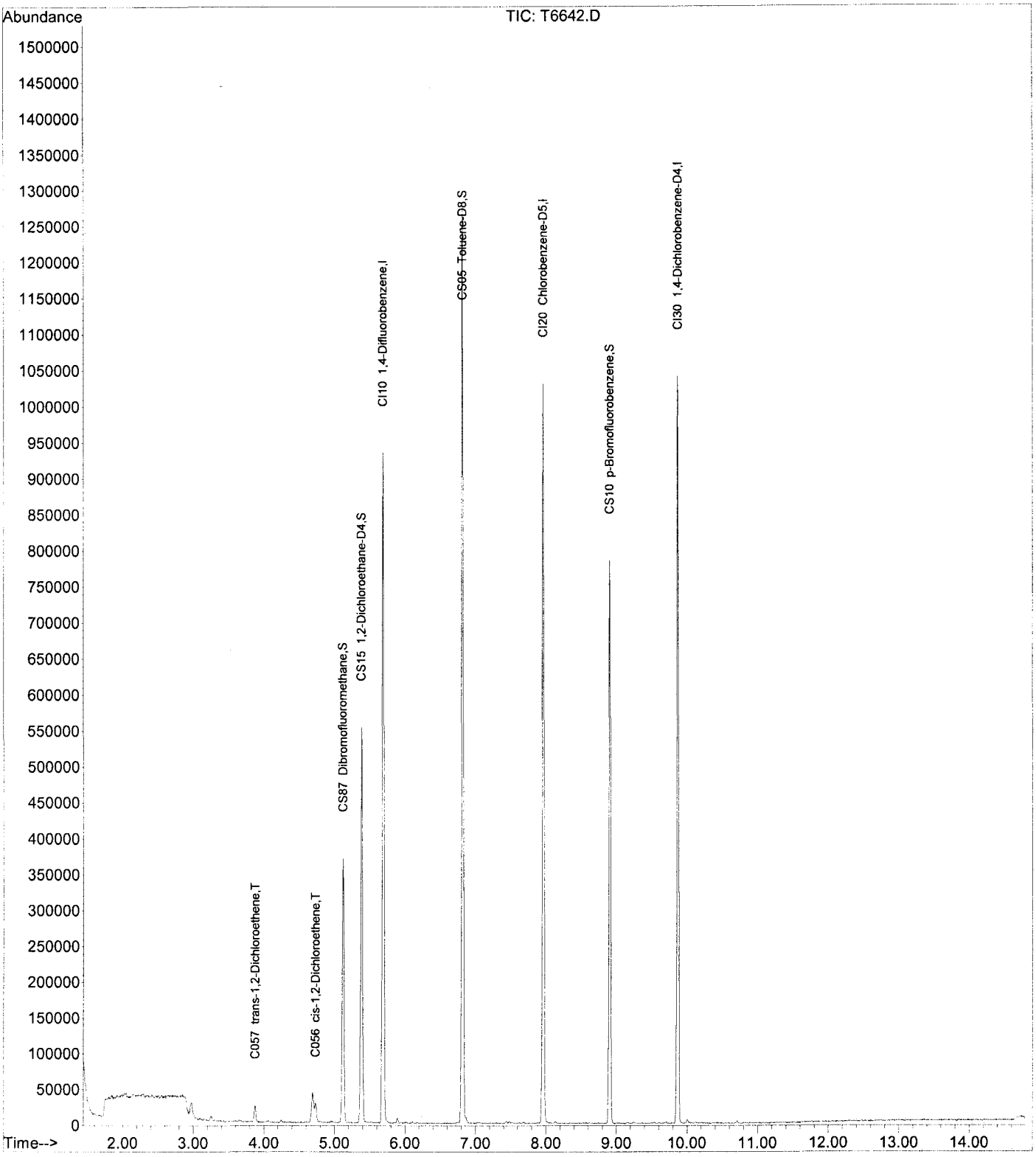
DLB 12/30/09

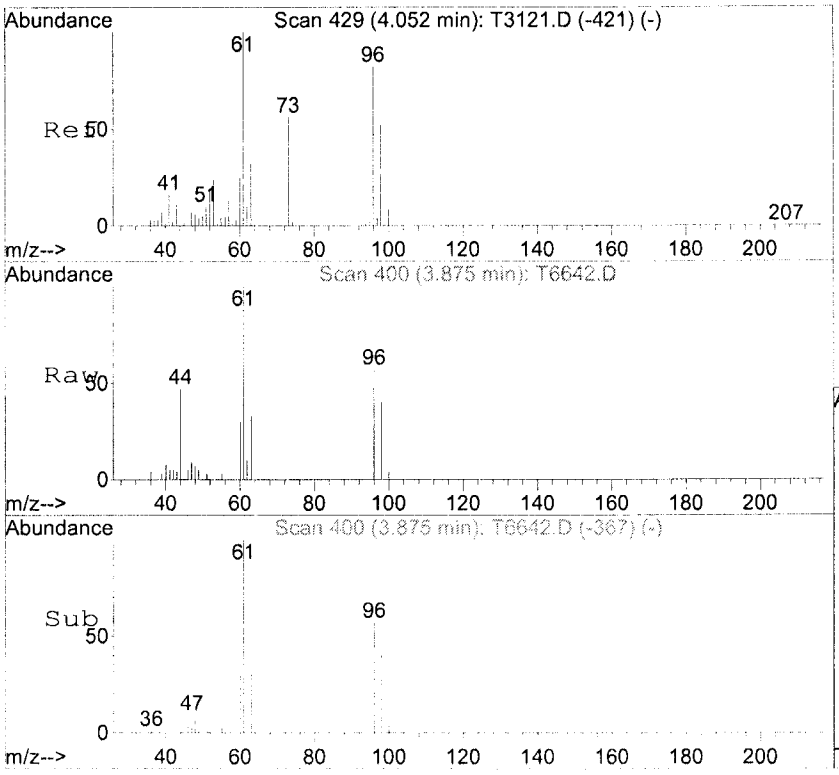
Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6642.D
Acq On : 3 Dec 2009 16:00
Sample : RSL0187-01
Misc :
MS Integration Params: RTEINT.P

Vial: 44
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 20:32:02 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M

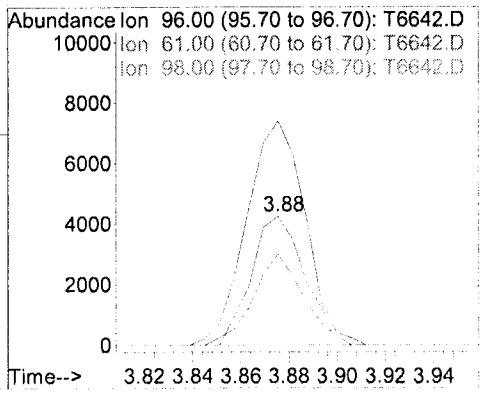


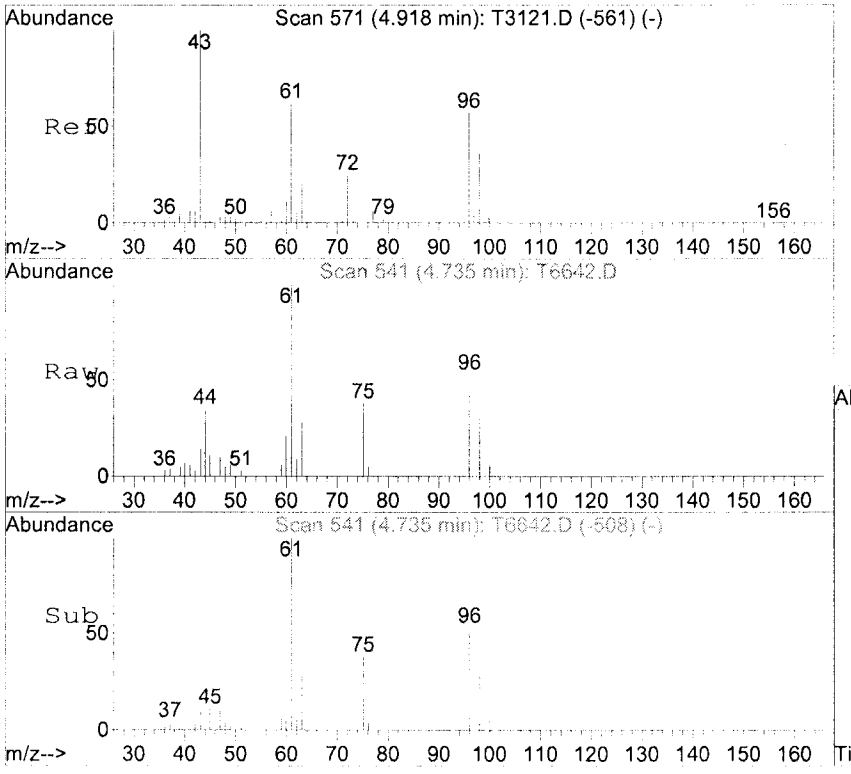


#18
C057 trans-1,2-Dichloroethene
Concen: 0.74 ug/L
RT: 3.88 min Scan# 400
Delta R.T. -0.00 min
Lab File: T6642.D
Acq: 3 Dec 2009 16:00

Tgt Ion: 96 Resp: 6691

Ion	Ratio	Lower	Upper
96	100		
61	174.3	167.6	207.6
98	70.4	44.0	84.0

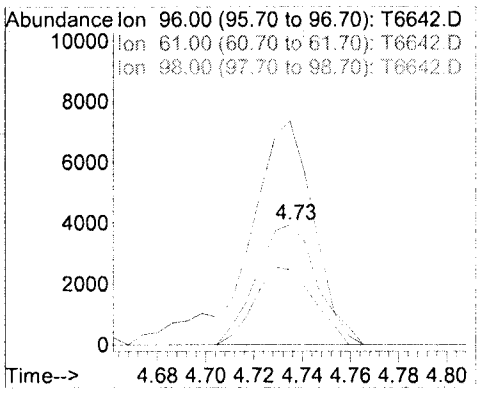




#23
C056 cis-1,2-Dichloroethene
Concen: 0.68 ug/L
RT: 4.73 min Scan# 541
Delta R.T. -0.00 min
Lab File: T6642.D
Acq: 3 Dec 2009 16:00

Tgt Ion: 96 Resp: 6879

Ion	Ratio	Lower	Upper
96	100		
61	186.9	152.8	192.8
98	62.5	44.6	84.6



Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

PZ-17

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis, Geraghty & Miller - NY9A8463
Matrix:	Water	Laboratory ID:	RSL0187-02	File ID:	T6643.D
Sampled:	11/30/09 18:11	Prepared:	12/03/09 11:54	Analyzed:	12/03/09 16:24
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	5	5.0	UD
79-34-5	1,1,2,2-Tetrachloroethane	5	5.0	UD
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	5	5.0	UD
79-00-5	1,1,2-Trichloroethane	5	5.0	UD
75-34-3	1,1-Dichloroethane	5	5.0	UD
75-35-4	1,1-Dichloroethene	5	5.0	UD
120-82-1	1,2,4-Trichlorobenzene	5	5.0	UD
96-12-8	1,2-Dibromo-3-chloropropane	5	5.0	UD
106-93-4	1,2-Dibromoethane	5	5.0	UD
95-50-1	1,2-Dichlorobenzene	5	5.0	UD
107-06-2	1,2-Dichloroethane	5	5.0	UD
78-87-5	1,2-Dichloropropane	5	5.0	UD
541-73-1	1,3-Dichlorobenzene	5	5.0	UD
106-46-7	1,4-Dichlorobenzene	5	5.0	UD
78-93-3	2-Butanone	5	25	UD
591-78-6	2-Hexanone	5	25	UD
108-10-1	4-Methyl-2-pentanone	5	25	UD
67-64-1	Acetone	5	25	UD
71-43-2	Benzene	5	5.0	UD
75-27-4	Bromodichloromethane	5	5.0	UD
75-25-2	Bromoform	5	5.0	UD
74-83-9	Bromomethane	5	5.0	UD
75-15-0	Carbon disulfide	5	5.0	UD
56-23-5	Carbon Tetrachloride	5	5.0	UD
108-90-7	Chlorobenzene	5	5.0	UD
75-00-3	Chloroethane	5	5.0	UD
67-66-3	Chloroform	5	5.0	UD
74-87-3	Chloromethane	5	5.0	UD
156-59-2	cis-1,2-Dichloroethene	5	5.0	UD
10061-01-5	cis-1,3-Dichloropropene	5	5.0	UD
110-82-7	Cyclohexane	5	5.0	UD
124-48-1	Dibromochloromethane	5	5.0	UD
75-71-8	Dichlorodifluoromethane	5	5.0	UD
100-41-4	Ethylbenzene	5	5.0	UD
98-82-8	Isopropylbenzene	5	5.0	UD
79-20-9	Methyl Acetate	5	5.0	UD
108-87-2	Methylcyclohexane	5	5.0	UD
75-09-2	Methylene Chloride	5	5.0	UD
1634-04-4	Methyl-t-Butyl Ether (MTBE)	5	5.0	UD

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

PZ-17

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis, Geraghty & Miller - NY9A8463
Matrix:	Water	Laboratory ID:	RSL0187-02	File ID:	T6643.D
Sampled:	11/30/09 18:11	Prepared:	12/03/09 11:54	Analyzed:	12/03/09 16:24
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	5	5.0	UD
127-18-4	Tetrachloroethene	5	5.0	UD
108-88-3	Toluene	5	5.0	UD
156-60-5	trans-1,2-Dichloroethene	5	5.0	UD
10061-02-6	trans-1,3-Dichloropropene	5	5.0	UD
79-01-6	Trichloroethene	5	5.0	UD
75-69-4	Trichlorofluoromethane	5	5.0	UD
75-01-4	Vinyl chloride	5	5.0	UD
1330-20-7	Xylenes, total	5	10	UD

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	25.1	100	66 - 137	D
4-Bromofluorobenzene	25.0	23.7	95	73 - 120	D
Toluene-d8	25.0	24.6	98	71 - 126	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	228297	9.87	348104	9.87	
1,4-Difluorobenzene	568745	5.69	809705	5.69	
Chlorobenzene-d5	437673	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6643.D Vial: 45
Acq On : 3 Dec 2009 16:24 Operator: LH
Sample : RSL0187-02@5X Inst : 5975 T
Misc : FOAM Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:10 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

CLEAN TDS 12/3/09

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	568745	25.00	ug/L	0.00 70.24%
43) CI20	Chlorobenzene-D5	7.96	117	437673	25.00	ug/L	0.00 67.07%
62) CI30	1,4-Dichlorobenzene-	9.87	152	228297	25.00	ug/L	0.00 65.58%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	190827	24.18	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	96.72%		
31) CS15	1,2-Dichloroethane-D	5.38	65	325727	25.08	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	100.32%		
44) CS05	Toluene-D8	6.81	98	660449	24.62	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	98.48%		
61) CS10	p-Bromofluorobenzene	8.90	174	175009	23.72	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	94.88%		

Target Compounds					Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.
3) C010	Chloromethane	1.72	50	1055	N.D.
4) C020	Vinyl chloride	1.85	62	666	N.D.
5) C015	Bromomethane	2.22	94	276	N.D.
6) C025	Chloroethane	2.35	64	519	N.D.
7) C275	Trichlorofluoromet	0.00	101	0	N.D.
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.
9) C030	Methylene chloride	3.65	84	1179	N.D.
10) C040	Carbon disulfide	3.36	76	540	N.D.
11) C036	Acrolein	3.09	56	374	N.D.
12) C038	Acrylonitrile	3.89	53	75	N.D.
13) C035	Acetone	3.25	43	6727	N.D.
14) C300	Acetonitrile	3.61	41	255	N.D.
15) C276	Iodomethane	0.00	142	0	N.D.
16) C291	1,1,2 Trichloro-1,	0.00	101	0	N.D.
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.
19) C255	Methyl Acetate	3.55	43	849	N.D.
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.
21) C125	Vinyl Acetate	4.28	43	82	N.D.
22) C051	2,2-Dichloropropan	4.69	77	1612	N.D.
23) C056	cis-1,2-Dichloroet	4.74	96	196	N.D.
24) C272	Tetrahydrofuran	4.96	42	6267	N.D.
25) C222	Bromochloromethane	0.00	128	0	N.D.
26) C060	Chloroform	5.00	83	591	N.D.
27) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.
28) C120	Carbon tetrachlori	0.00	117	0	N.D.
29) C116	1,1-Dichloropropen	5.20	75	163	N.D.
32) C165	Benzene	5.40	78	196	N.D.
33) C065	1,2-Dichloroethane	5.39	62	492	N.D.
34) C110	2-Butanone	4.75	43	2522	N.D.
35) C256	Cyclohexane	5.14	56	87	N.D.
36) C150	Trichloroethene	0.00	95	0	N.D.
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.
38) C278	Dibromomethane	0.00	93	0	N.D.

NVS 12/3/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6643.D Vial: 45
Acq On : 3 Dec 2009 16:24 Operator: LH
Sample : RSL0187-02@5X Inst : 5975 T
Misc : FOAM Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:10 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcycolhexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.87	92	925	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.72	43	922	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	7.37	43	398	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	8.03	91	256	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
63) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	8.90	105	193	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	53	0	N.D.	
69) C302	n-Propylbenzene	9.08	91	87	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	9.15	105	255	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	9.55	105	335	N.D.	
75) C308	sec-Butylbenzene	9.62	105	78	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	10.26	91	97	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	11.78	128	678	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

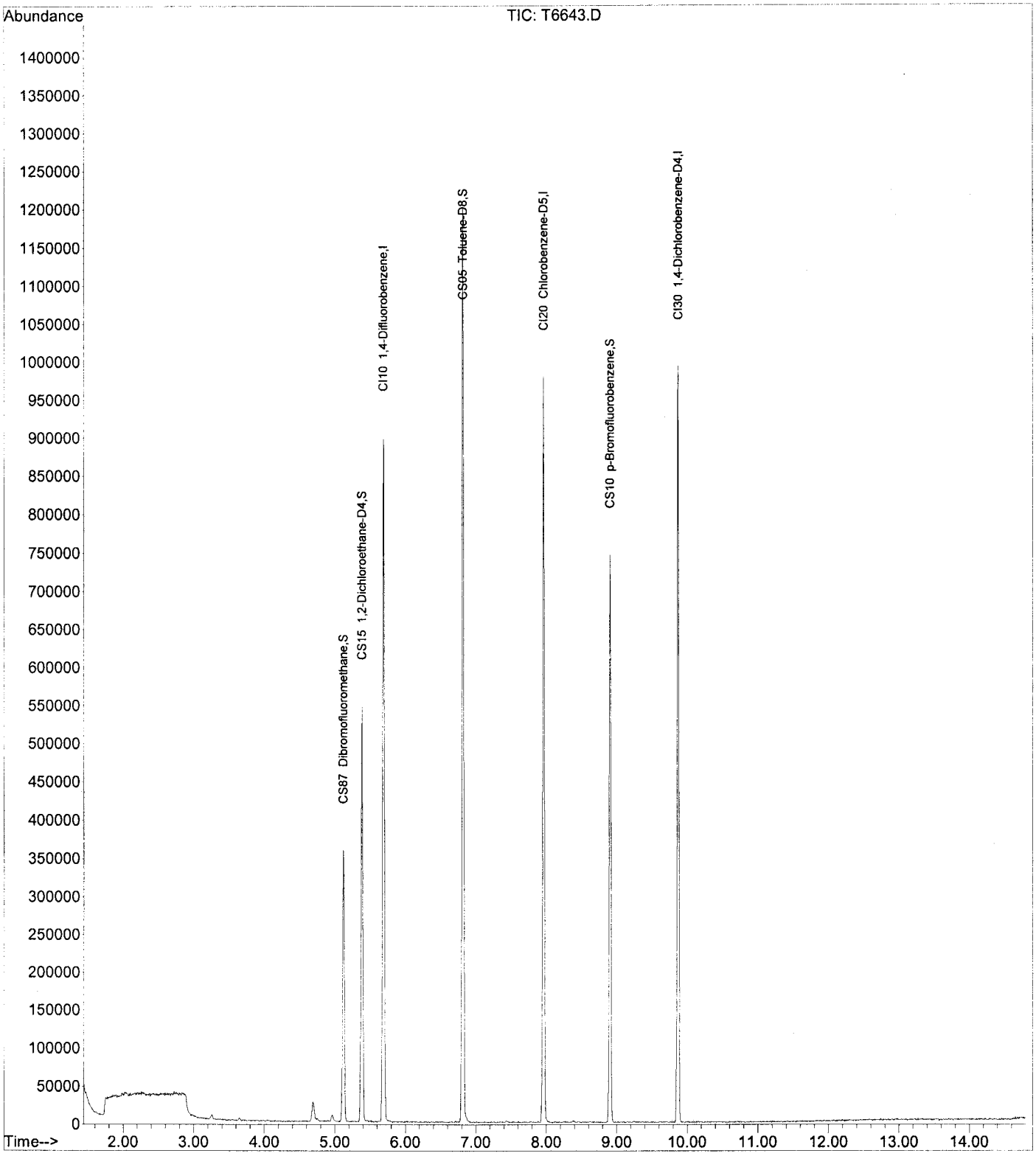
12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6643.D
Acq On : 3 Dec 2009 16:24
Sample : RSL0187-02@5X
Misc : FOAM
MS Integration Params: RTEINT.P

Vial: 45
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 20:32:10 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

PZ-18

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis, Geraghty & Miller - NY9A8463
Matrix:	Water	Laboratory ID:	RSL0187-03	File ID:	T6644.D
Sampled:	11/30/09 16:53	Prepared:	12/03/09 11:54	Analyzed:	12/03/09 16:48
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204	Instrument:	HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone	1	5.0	U
67-64-1	Acetone	1	2.2	J
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	0.82	J
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
124-48-1	Dibromochloromethane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U
75-09-2	Methylene Chloride	1	1.0	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	1	1.0	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

PZ-18

Laboratory: TestAmerica Buffalo | SDG:

Client: ARCADIS U.S., Inc. - Albany, NY | Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water | Laboratory ID: RSL0187-03 | File ID: T6644.D

Sampled: 11/30/09 16:53 | Prepared: 12/03/09 11:54 | Analyzed: 12/03/09 16:48

Solids: | Preparation: 5030B MS | Initial/Final: 5 mL / 5 mL

Batch: 9L03027 | Sequence: RL90313 | Calibration: R9L0204 | Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	0.83	J
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	25.0	100	66 - 137	
4-Bromofluorobenzene	25.0	24.1	96	73 - 120	
Toluene-d8	25.0	24.5	98	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	231834	9.87	348104	9.87	
1,4-Difluorobenzene	571073	5.69	809705	5.69	
Chlorobenzene-d5	432056	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6644.D Vial: 46
Acq On : 3 Dec 2009 16:48 Operator: LH
Sample : RSL0187-03 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:20 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

S+E TWS 12/3/09

	Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1)	CI10 1,4-Difluorobenzene	5.69	114	571073	25.00	ug/L	0.00 70.53%
43)	CI20 Chlorobenzene-D5	7.96	117	432056	25.00	ug/L	0.00 66.21%
62)	CI30 1,4-Dichlorobenzene-	9.87	152	231834	25.00	ug/L	0.00 66.60%
	System Monitoring Compounds						
30)	CS87 Dibromofluoromethane	5.12	111	190572	24.05	ug/L	0.00
	Spiked Amount 25.000 Range 70 - 130			Recovery = 96.20%			
31)	CS15 1,2-Dichloroethane-D	5.38	65	325667	24.97	ug/L	0.00
	Spiked Amount 25.000 Range 66 - 137			Recovery = 99.88%			
44)	CS05 Toluene-D8	6.81	98	648475	24.49	ug/L	0.00
	Spiked Amount 25.000 Range 71 - 126			Recovery = 97.96%			
61)	CS10 p-Bromofluorobenzene	8.90	174	175257	24.07	ug/L	0.00
	Spiked Amount 25.000 Range 73 - 120			Recovery = 96.28%			
	Target Compounds						Qvalue
2)	C290 Dichlorodifluorome	0.00	85	0	N.D.		
3)	C010 Chloromethane	1.72	50	1878	N.D.		
4)	C020 Vinyl chloride	1.84	62	1944	N.D.		
5)	C015 Bromomethane	2.23	94	173	N.D.		
6)	C025 Chloroethane	2.36	64	681	N.D.		
7)	C275 Trichlorofluoromet	0.00	101	0	N.D.		
8)	C045 1,1-Dichloroethene	0.00	96	0	N.D.		
9)	C030 Methylene chloride	0.00	84	0	N.D.		
10)	C040 Carbon disulfide	3.37	76	2787	N.D.		
11)	C036 Acrolein	3.10	56	620	N.D.		
12)	C038 Acrylonitrile	0.00	53	0	N.D.		
13)	C035 Acetone	3.25	43	13791	2.19	ug/L	95
14)	C300 Acetonitrile	3.54	41	263	N.D.		
15)	C276 Iodomethane	0.00	142	0	N.D.		
16)	C291 1,1,2 Trichloro-1,	0.00	101	0	N.D.		
17)	C962 T-butyl Methyl Eth	3.86	73	161	N.D.		
18)	C057 trans-1,2-Dichloroet	3.88	96	7152	0.83	ug/L	95
19)	C255 Methyl Acetate	3.54	43	623	N.D.		
20)	C050 1,1-Dichloroethane	4.25	63	1966	N.D.		
21)	C125 Vinyl Acetate	4.27	43	240	N.D.		
22)	C051 2,2-Dichloropropan	4.69	77	1109	N.D.		
23)	C056 cis-1,2-Dichloroethe	4.73	96	8008	0.82	ug/L #	75
24)	C272 Tetrahydrofuran	4.97	42	1568	N.D.		
25)	C222 Bromochloromethane	0.00	128	0	N.D.		
26)	C060 Chloroform	0.00	83	0	N.D.		
27)	C115 1,1,1-Trichloroeth	0.00	97	0	N.D.		
28)	C120 Carbon tetrachlori	0.00	117	0	N.D.		
29)	C116 1,1-Dichloropropen	5.22	75	77	N.D.		
32)	C165 Benzene	5.41	78	1766	N.D.		
33)	C065 1,2-Dichloroethane	5.44	62	109	N.D.		
34)	C110 2-Butanone	4.75	43	3817	N.D.		
35)	C256 Cyclohexane	5.13	56	812	N.D.		
36)	C150 Trichloroethene	5.89	95	2624	N.D.		
37)	C140 1,2-Dichloropropan	0.00	63	0	N.D.		
38)	C278 Dibromomethane	0.00	93	0	N.D.		

DWS 12/3/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6644.D Vial: 46
Acq On : 3 Dec 2009 16:48 Operator: LH
Sample : RSL0187-03 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:20 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcycolhexane	6.01	83	636	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.87	92	1479	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.72	43	866	N.D.	
50) C220	Tetrachloroethene	7.29	166	641	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	7.36	43	275	N.D.	
55) C235	Chlorobenzene	7.98	112	213	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	8.04	91	280	N.D.	
58) C246	m,p-Xylene	8.14	106	86	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
63) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	8.74	105	183	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	53	0	N.D.	
69) C302	n-Propylbenzene	9.09	91	212	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	9.14	105	723	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	9.53	105	990	N.D.	
75) C308	sec-Butylbenzene	9.67	105	238	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	10.14	91	142	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	11.78	128	957	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

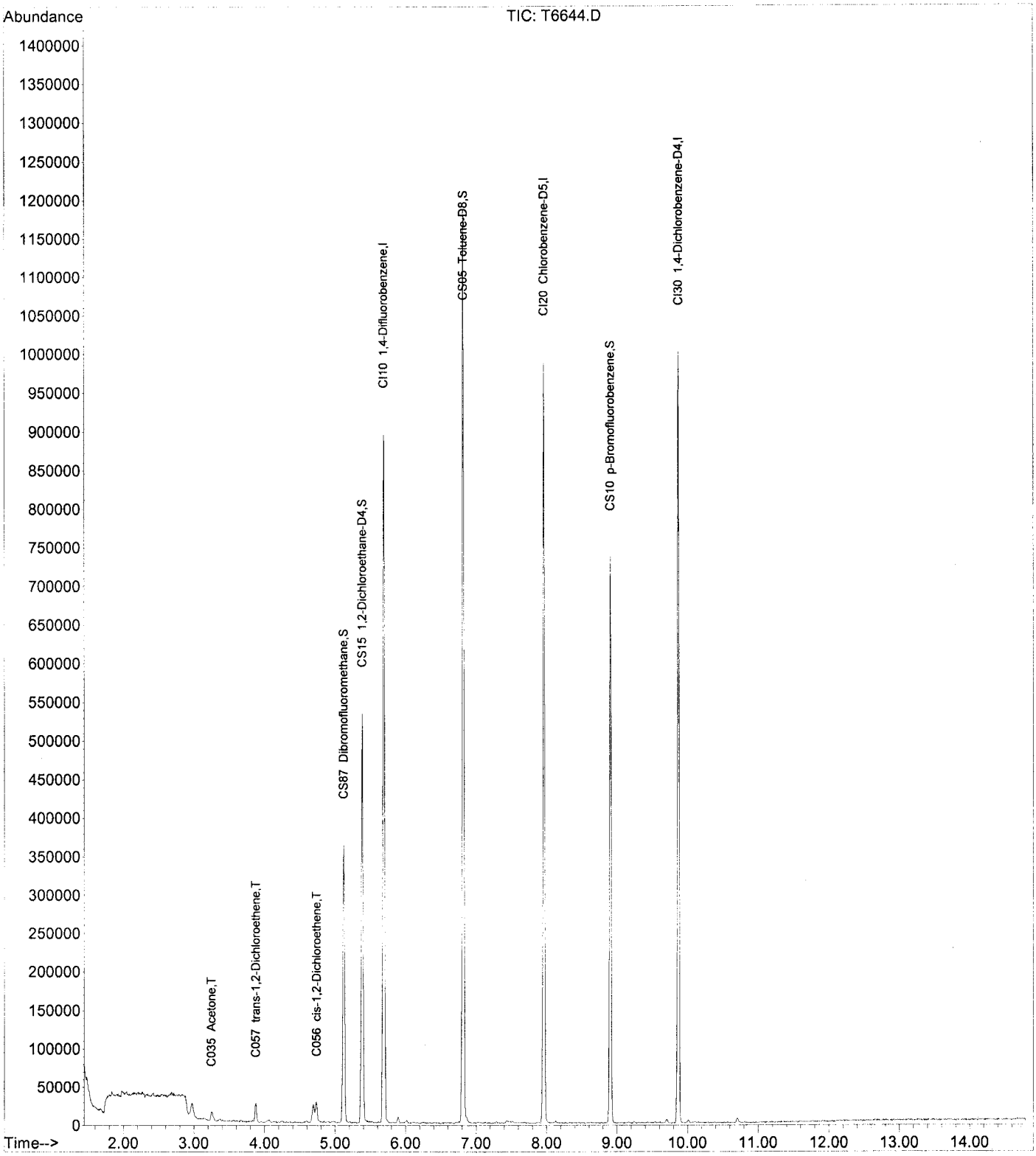
NM 12/30/09

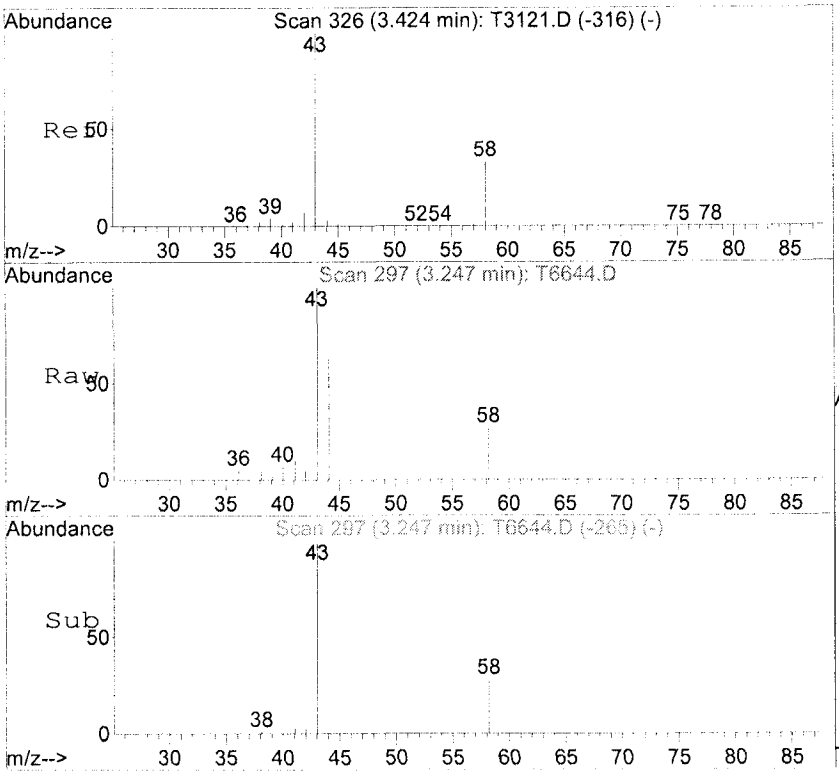
Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6644.D
Acq On : 3 Dec 2009 16:48
Sample : RSL0187-03
Misc :
MS Integration Params: RTEINT.P

Vial: 46
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 20:32:20 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M

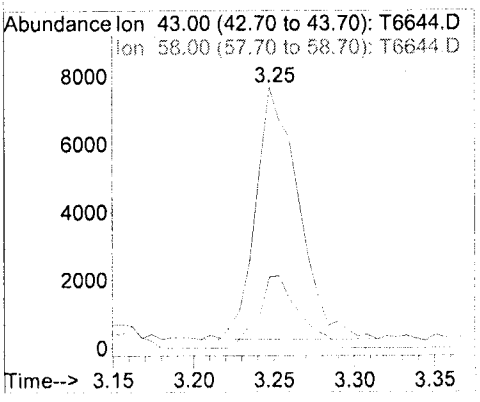


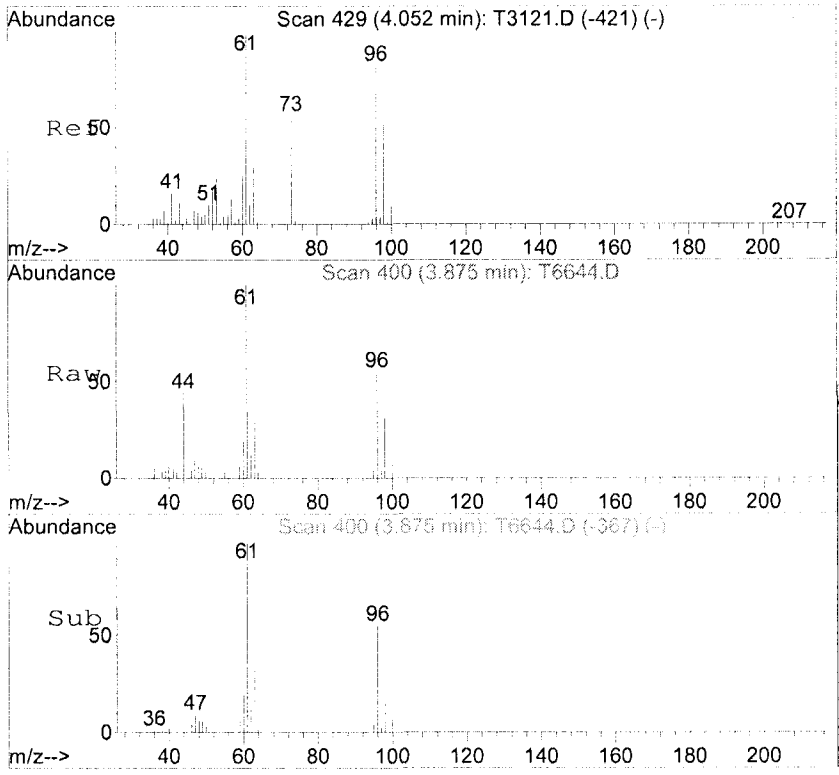


#13
C035 Acetone
Concen: 2.19 ug/L
RT: 3.25 min Scan# 297
Delta R.T. -0.01 min
Lab File: T6644.D
Acq: 3 Dec 2009 16:48

Tgt Ion: 43 Resp: 13791

Ion	Ratio	Lower	Upper
43	100		
58	27.2	19.7	29.5

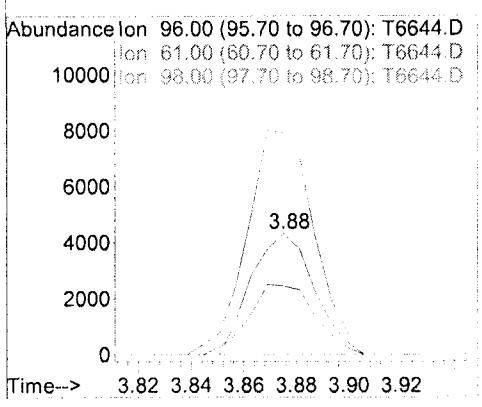


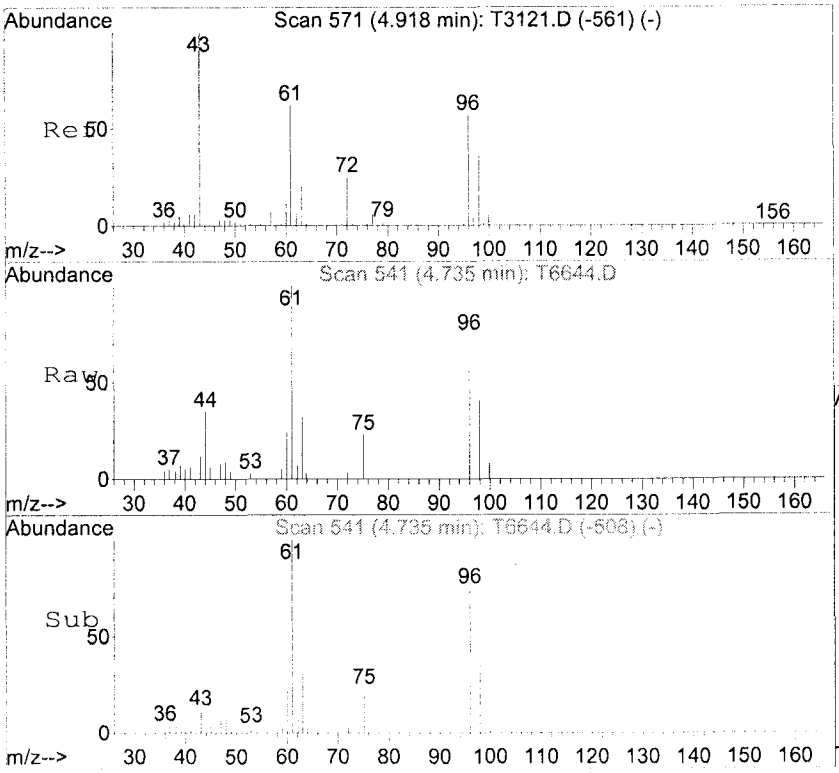


#18
C057 trans-1,2-Dichloroethene
Concen: 0.83 ug/L
RT: 3.88 min Scan# 400
Delta R.T. -0.00 min
Lab File: T6644.D
Acq: 3 Dec 2009 16:48

Tgt Ion: 96 Resp: 7152

Ion	Ratio	Lower	Upper
96	100		
61	183.4	167.6	207.6
98	56.6	44.0	84.0

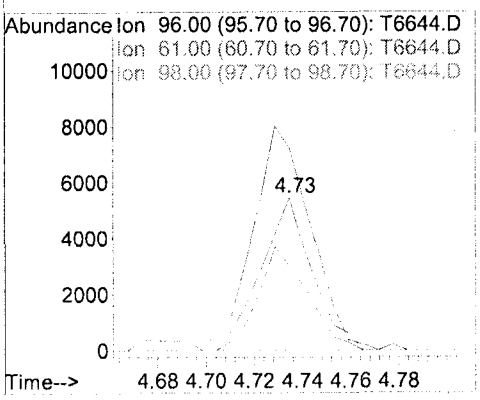




#23
C056 cis-1,2-Dichloroethene
Concen: 0.82 ug/L
RT: 4.73 min Scan# 541
Delta R.T. -0.00 min
Lab File: T6644.D
Acq: 3 Dec 2009 16:48

Tgt Ion: 96 Resp: 8008

Ion	Ratio	Lower	Upper
96	100		
61	132.5	152.8	192.8#
98	54.6	44.6	84.6



Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

PZ-19

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis, Geraghty & Miller - NY9A8463
Matrix:	Water	Laboratory ID:	RSL0187-04	File ID:	T6645.D
Sampled:	11/30/09 18:31	Prepared:	12/03/09 11:54	Analyzed:	12/03/09 17:12
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone	1	5.0	U
67-64-1	Acetone	1	3.7	J
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
124-48-1	Dibromochloromethane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U
75-09-2	Methylene Chloride	1	1.0	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

PZ-19

Laboratory:	TestAmerica Buffalo		SDG:		
Client:	ARCADIS U.S., Inc. - Albany, NY		Project:	Arcadis, Geraghty & Miller - NY9A8463	
Matrix:	Water	Laboratory ID:	RSL0187-04	File ID:	T6645.D
Sampled:	11/30/09 18:31	Prepared:	12/03/09 11:54	Analyzed:	12/03/09 17:12
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	0.59	J
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	25.0	100	66 - 137	
4-Bromofluorobenzene	25.0	23.6	95	73 - 120	
Toluene-d8	25.0	24.6	98	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	225485	9.87	348104	9.87	
1,4-Difluorobenzene	560057	5.69	809705	5.69	
Chlorobenzene-d5	429584	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6645.D Vial: 47
Acq On : 3 Dec 2009 17:12 Operator: LH
Sample : RSL0187-04 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:28 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

SJE
TWS 12/3/09

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	560057	25.00	ug/L	0.00 69.17%
43) CI20	Chlorobenzene-D5	7.96	117	429584	25.00	ug/L	0.00 65.83%
62) CI30	1,4-Dichlorobenzene-	9.87	152	225485	25.00	ug/L	0.00 64.78%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	186508	24.00	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	96.00%	
31) CS15	1,2-Dichloroethane-D	5.38	65	320098	25.03	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	100.12%	
44) CS05	Toluene-D8	6.81	98	647404	24.59	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	98.36%	
61) CS10	p-Bromofluorobenzene	8.90	174	171132	23.63	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	94.52%	
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.		
3) C010	Chloromethane	1.72	50	1166	N.D.		
4) C020	Vinyl chloride	0.00	62	0	N.D.		
5) C015	Bromomethane	2.22	94	270	N.D.		
6) C025	Chloroethane	2.35	64	789	N.D.		
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.		
9) C030	Methylene chloride	0.00	84	0	N.D.		
10) C040	Carbon disulfide	3.36	76	2589	N.D.		
11) C036	Acrolein	3.09	56	1013	2.96	ug/L	85
12) C038	Acrylonitrile	0.00	53	0	N.D.		
13) C035	Acetone	3.25	43	23017	3.72	ug/L	95
14) C300	Acetonitrile	3.53	41	1487	N.D.		
15) C276	Iodomethane	3.31	142	471	N.D.		
16) C291	1,1,2 Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.		
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.		
19) C255	Methyl Acetate	3.56	43	1072	N.D.		
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.		
21) C125	Vinyl Acetate	4.29	43	206	N.D.		
22) C051	2,2-Dichloropropan	4.70	77	853	N.D.		
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.		
24) C272	Tetrahydrofuran	4.97	42	1781	N.D.		
25) C222	Bromochloromethane	0.00	128	0	N.D.		
26) C060	Chloroform	4.99	83	183	N.D.		
27) C115	1,1,1-Trichloroeth	5.11	97	1125	N.D.		
28) C120	Carbon tetrachlori	0.00	117	0	N.D.		
29) C116	1,1-Dichloropropen	5.17	75	78	N.D.		
32) C165	Benzene	5.41	78	2514	N.D.		
33) C065	1,2-Dichloroethane	5.39	62	307	N.D.		
34) C110	2-Butanone	4.75	43	4696	N.D.		
35) C256	Cyclohexane	5.14	56	1011	N.D.		
36) C150	Trichloroethene	5.89	95	1206	N.D.		
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

AWG 12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6645.D Vial: 47
Acq On : 3 Dec 2009 17:12 Operator: LH
Sample : RSL0187-04 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:28 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcycolhexane	6.01	83	590	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.87	92	1936	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.72	43	1684	N.D.	
50) C220	Tetrachloroethene	7.28	166	4133	0.59 ug/L	98
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	7.37	43	969	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	8.05	91	704	N.D.	
58) C246	m,p-Xylene	8.12	106	787	N.D.	
59) C247	o-Xylene	8.45	106	165	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
63) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	8.91	105	312	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	53	0	N.D.	
69) C302	n-Propylbenzene	8.90	91	729	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	9.20	105	89	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	9.54	105	813	N.D.	
75) C308	sec-Butylbenzene	9.61	105	82	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	9.87	119	73	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	10.11	91	89	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	11.79	128	256	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

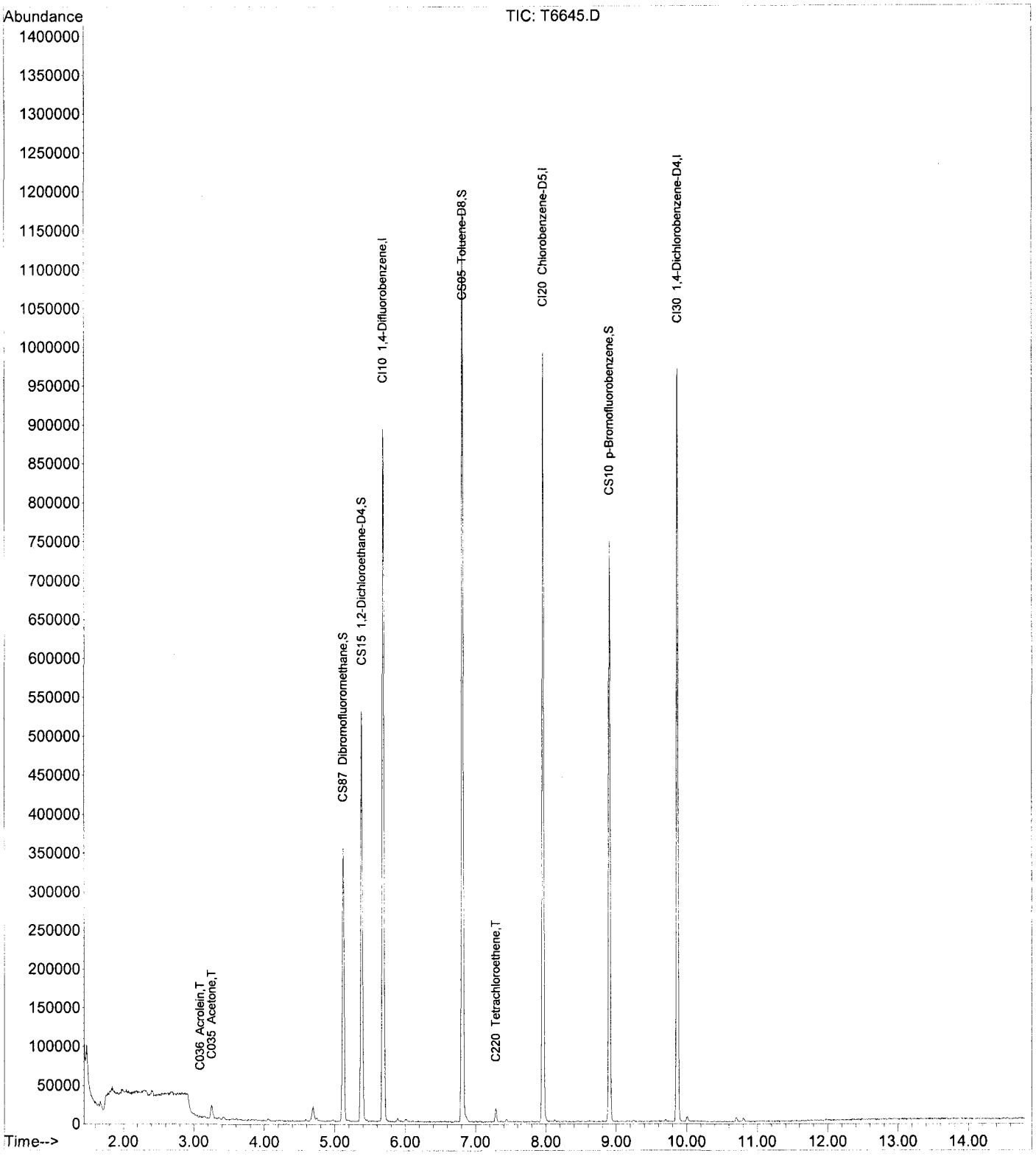
ALY 12/30/09

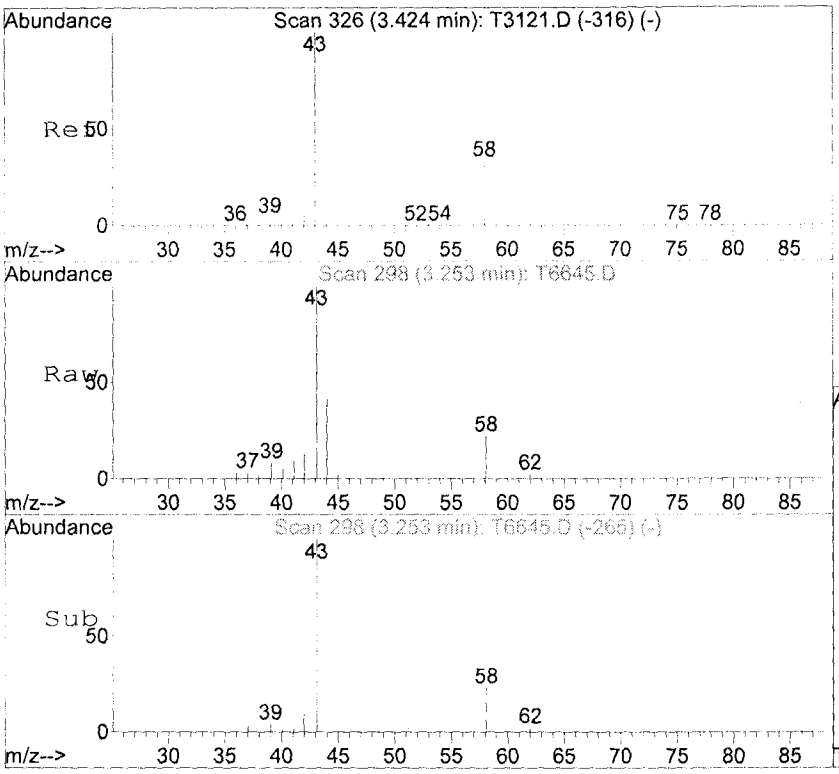
Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6645.D
Acq On : 3 Dec 2009 17:12
Sample : RSL0187-04
Misc :
MS Integration Params: RTEINT.P

Vial: 47
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 20:32:28 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M

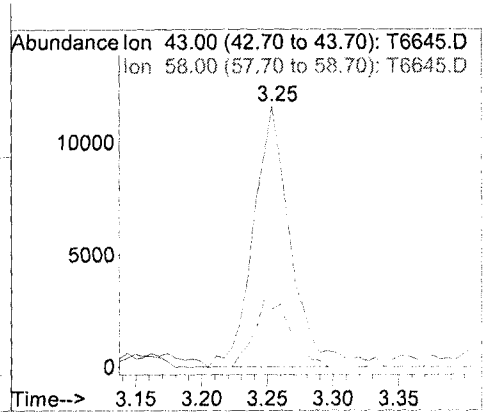


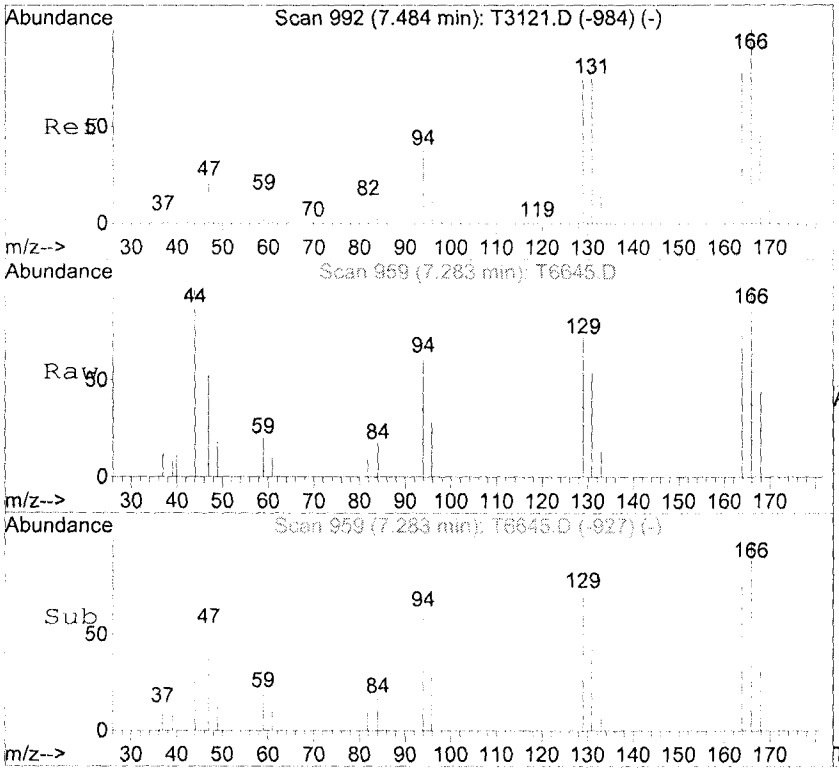


#13
C035 Acetone
Concen: 3.72 ug/L
RT: 3.25 min Scan# 298
Delta R.T. -0.00 min
Lab File: T6645.D
Acq: 3 Dec 2009 17:12

Tgt Ion: 43 Resp: 23017

Ion	Ratio	Lower	Upper
43	100		
58	22.2	19.7	29.5

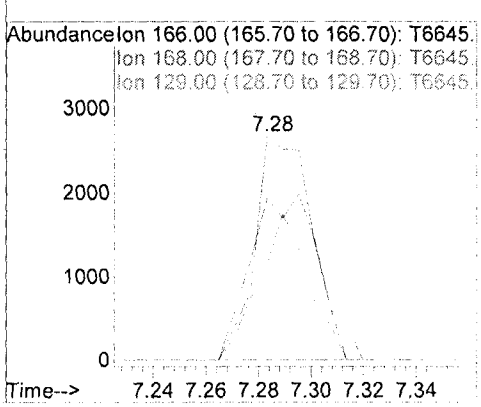




#50
C220 Tetrachloroethene
Concen: 0.59 ug/L
RT: 7.28 min Scan# 959
Delta R.T. -0.01 min
Lab File: T6645.D
Acq: 3 Dec 2009 17:12

Tgt Ion:166 Resp: 4133

Ion	Ratio	Lower	Upper
166	100		
168	43.8	26.2	66.2
129	72.4	51.9	91.9



Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

PZ-20

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water Laboratory ID: RSL0187-05 File ID: T6646.D

Sampled: 11/30/09 17:36 Prepared: 12/03/09 11:54 Analyzed: 12/03/09 17:36

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9L03027 Sequence: RL90313 Calibration: R9L0204 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
124-48-1	Dibromochloromethane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U
75-09-2	Methylene Chloride	1	1.0	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	1	1.0	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

PZ-20

Laboratory: TestAmerica Buffalo | SDG:

Client: ARCADIS U.S., Inc. - Albany, NY | Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water | Laboratory ID: RSL0187-05 | File ID: T6646.D

Sampled: 11/30/09 17:36 | Prepared: 12/03/09 11:54 | Analyzed: 12/03/09 17:36

Solids: | Preparation: 5030B MS | Initial/Final: 5 mL / 5 mL

Batch: 9L03027 | Sequence: RL90313 | Calibration: R9L0204 | Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.8	99	66 - 137	
4-Bromofluorobenzene	25.0	23.8	95	73 - 120	
Toluene-d8	25.0	23.9	95	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	226397	9.87	348104	9.87	
1,4-Difluorobenzene	556374	5.69	809705	5.69	
Chlorobenzene-d5	421723	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6646.D Vial: 48
Acq On : 3 Dec 2009 17:36 Operator: LH
Sample : RSL0187-05 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:38 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

S+E
JDS 12/3/09

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	556374	25.00	ug/L	0.00 68.71%
43) CI20	Chlorobenzene-D5	7.96	117	421723	25.00	ug/L	0.00 64.63%
62) CI30	1,4-Dichlorobenzene-	9.87	152	226397	25.00	ug/L	0.00 65.04%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	185083	23.98	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	95.92%	
31) CS15	1,2-Dichloroethane-D	5.38	65	315441	24.83	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	99.32%	
44) CS05	Toluene-D8	6.81	98	616715	23.86	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	95.44%	
61) CS10	p-Bromofluorobenzene	8.90	174	169021	23.78	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	95.12%	

Target Compounds						Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.	
3) C010	Chloromethane	1.72	50	1219	N.D.	
4) C020	Vinyl chloride	0.00	62	0	N.D.	
5) C015	Bromomethane	2.24	94	784	N.D.	
6) C025	Chloroethane	2.35	64	990	N.D.	
7) C275	Trichlorofluoromet	0.00	101	0	N.D.	
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.	
9) C030	Methylene chloride	0.00	84	0	N.D.	
10) C040	Carbon disulfide	3.36	76	1246	N.D.	
11) C036	~~Acrolein~~	~~3.10~~	~~56~~	~~682~~	~~2.01 ug/L~~	97
12) C038	Acrylonitrile	0.00	53	0	N.D.	
13) C035	Acetone	3.25	43	6893	N.D.	
14) C300	Acetonitrile	3.59	41	285	N.D.	
15) C276	Iodomethane	0.00	142	0	N.D.	
16) C291	1,1,2 Trichloro-1,	0.00	101	0	N.D.	
17) C962	T-butyl Methyl Eth	3.85	73	81	N.D.	
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.	
19) C255	Methyl Acetate	3.57	43	297	N.D.	
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.	
21) C125	Vinyl Acetate	4.28	43	220	N.D.	
22) C051	2,2-Dichloropropan	4.69	77	600	N.D.	
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.	
24) C272	Tetrahydrofuran	4.95	42	1085	N.D.	
25) C222	Bromochloromethane	0.00	128	0	N.D.	
26) C060	Chloroform	0.00	83	0	N.D.	
27) C115	1,1,1-Trichloroeth	5.11	97	738	N.D.	
28) C120	Carbon tetrachlori	0.00	117	0	N.D.	
29) C116	1,1-Dichloropropen	5.17	75	76	N.D.	
32) C165	Benzene	5.40	78	1084	N.D.	
33) C065	1,2-Dichloroethane	5.41	62	190	N.D.	
34) C110	2-Butanone	4.74	43	2216	N.D.	
35) C256	Cyclohexane	5.14	56	509	N.D.	
36) C150	Trichloroethene	5.90	95	395	N.D.	
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.	
38) C278	Dibromomethane	0.00	93	0	N.D.	

DMS 12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6646.D Vial: 48
Acq On : 3 Dec 2009 17:36 Operator: LH
Sample : RSL0187-05 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:38 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcycolhexane	6.00	83	345	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.86	92	978	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.72	43	689	N.D.	
50) C220	Tetrachloroethene	7.29	166	381	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	7.35	43	160	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	8.04	91	386	N.D.	
58) C246	m,p-Xylene	8.13	106	378	N.D.	
59) C247	o-Xylene	8.46	106	75	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
63) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	8.91	105	370	N.D.	
65) C301	Bromobenzene	8.90	156	82	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	0.00	110	0	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	53	0	N.D.	
69) C302	n-Propylbenzene	9.08	91	73	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	9.23	105	82	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	9.55	105	179	N.D.	
75) C308	sec-Butylbenzene	9.73	105	159	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	10.05	91	79	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	11.77	128	867	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

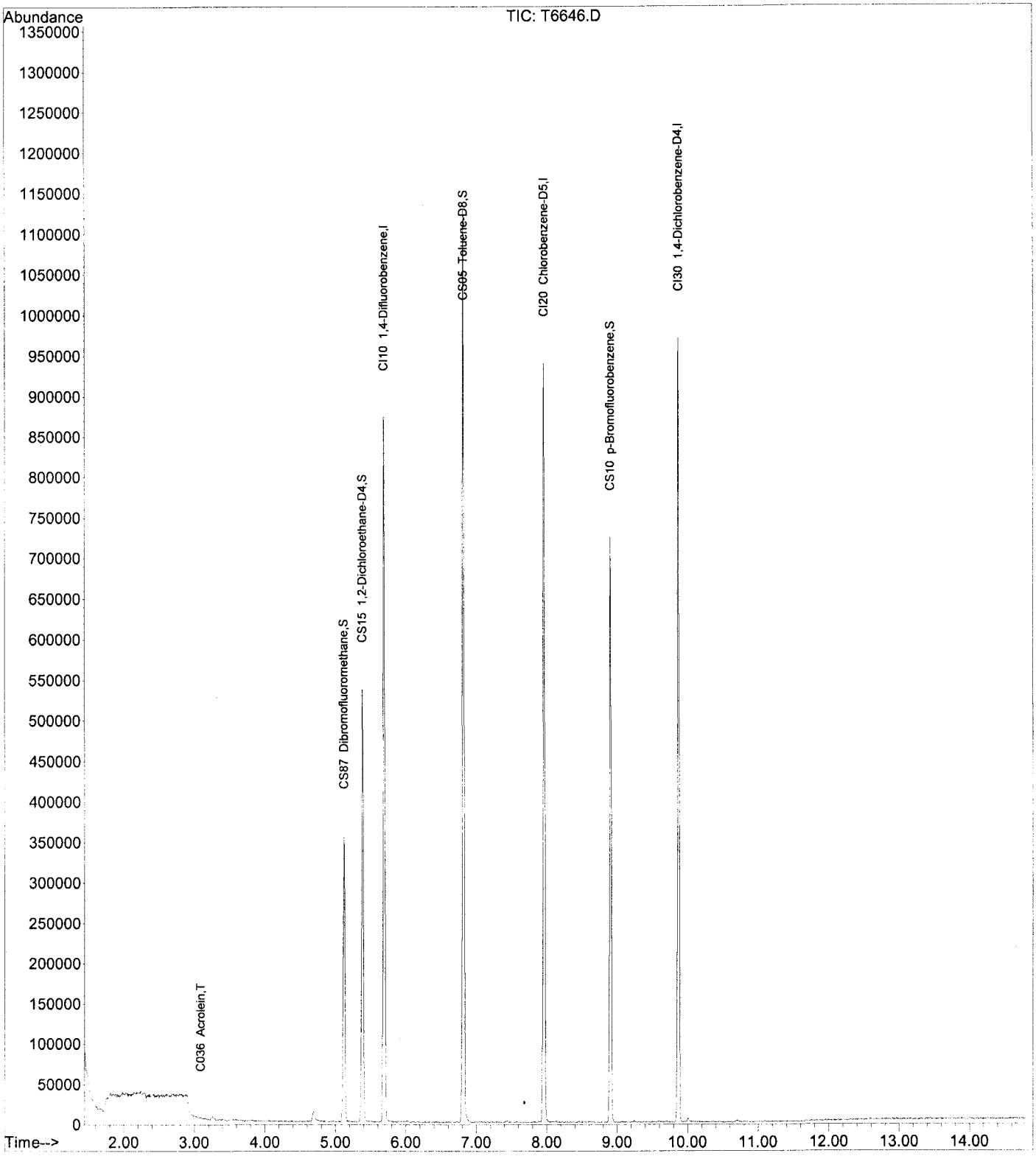
DW 12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6646.D
Acq On : 3 Dec 2009 17:36
Sample : RSL0187-05
Misc :
MS Integration Params: RTEINT.P

Vial: 48
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 20:32:38 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

TRIP BLANK

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water Laboratory ID: RSL0187-06 File ID: T6647.D

Sampled: 11/30/09 00:00 Prepared: 12/03/09 11:54 Analyzed: 12/03/09 18:00

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9L03027 Sequence: RL90313 Calibration: R9L0204 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
124-48-1	Dibromochloromethane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U
75-09-2	Methylene Chloride	1	1.0	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	1	1.0	U

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

TRIP BLANK

Laboratory:	TestAmerica Buffalo		SDG:		
Client:	ARCADIS U.S., Inc. - Albany, NY		Project:	Arcadis, Geraghty & Miller - NY9A8463	
Matrix:	Water	Laboratory ID:	RSL0187-06	File ID:	T6647.D
Sampled:	11/30/09 00:00	Prepared:	12/03/09 11:54	Analyzed:	12/03/09 18:00
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204	Instrument:	HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	24.6	99	66 - 137	
4-Bromofluorobenzene	25.0	23.9	96	73 - 120	
Toluene-d8	25.0	24.3	97	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	234298	9.87	348104	9.87	
1,4-Difluorobenzene	556397	5.69	809705	5.69	
Chlorobenzene-d5	431314	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6647.D Vial: 49
Acq On : 3 Dec 2009 18:00 Operator: LH
Sample : RSL0187-06 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:46 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

CLEAN
TLS 12/3/09

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	556397	25.00	ug/L	0.00 68.72%
43) CI20	Chlorobenzene-D5	7.96	117	431314	25.00	ug/L	0.00 66.10%
62) CI30	1,4-Dichlorobenzene-	9.87	152	234298	25.00	ug/L	0.00 67.31%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	180546	23.39	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	93.56%		
31) CS15	1,2-Dichloroethane-D	5.38	65	313089	24.64	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	98.56%		
44) CS05	Toluene-D8	6.81	98	643383	24.34	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	97.36%		
61) CS10	p-Bromofluorobenzene	8.90	174	173858	23.91	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	95.64%		

Target Compounds					Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.
3) C010	Chloromethane	1.72	50	259	N.D.
4) C020	Vinyl chloride	1.85	62	568	N.D.
5) C015	Bromomethane	2.24	94	169	N.D.
6) C025	Chloroethane	2.34	64	272	N.D.
7) C275	Trichlorofluoromet	0.00	101	0	N.D.
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.
9) C030	Methylene chloride	3.66	84	426	N.D.
10) C040	Carbon disulfide	0.00	76	0	N.D.
11) C036	Acrolein	3.11	56	328	N.D.
12) C038	Acrylonitrile	0.00	53	0	N.D.
13) C035	Acetone	3.26	43	3646	N.D.
14) C300	Acetonitrile	3.51	41	287	N.D.
15) C276	Iodomethane	0.00	142	0	N.D.
16) C291	1,1,2 Trichloro-1,	0.00	101	0	N.D.
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.
19) C255	Methyl Acetate	3.55	43	765	N.D.
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.
21) C125	Vinyl Acetate	4.30	43	221	N.D.
22) C051	2,2-Dichloropropan	4.70	77	405	N.D.
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.
24) C272	Tetrahydrofuran	4.96	42	8292	N.D.
25) C222	Bromochloromethane	0.00	128	0	N.D.
26) C060	Chloroform	5.00	83	314	N.D.
27) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.
28) C120	Carbon tetrachlori	0.00	117	0	N.D.
29) C116	1,1-Dichloropropen	0.00	75	0	N.D.
32) C165	Benzene	0.00	78	0	N.D.
33) C065	1,2-Dichloroethane	5.39	62	103	N.D.
34) C110	2-Butanone	4.75	43	1829	N.D.
35) C256	Cyclohexane	0.00	56	0	N.D.
36) C150	Trichloroethene	0.00	95	0	N.D.
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.
38) C278	Dibromomethane	0.00	93	0	N.D.

DMB 12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6647.D Vial: 49
Acq On : 3 Dec 2009 18:00 Operator: LH
Sample : RSL0187-06 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 20:32:46 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichlorometha	0.00	83	0	N.D.	
40) C161	2-Chloroethylvinyl	0.00	63	0	N.D.	
41) C012	Methylcycolhexane	0.00	83	0	N.D.	
42) C145	cis-1,3-Dichloropr	0.00	75	0	N.D.	
45) C230	Toluene	6.86	92	962	N.D.	
46) C170	trans-1,3-Dichloro	0.00	75	0	N.D.	
47) C284	Ethyl Methacrylate	0.00	69	0	N.D.	
48) C160	1,1,2-Trichloroeth	0.00	83	0	N.D.	
49) C210	4-Methyl-2-pentano	6.73	43	187	N.D.	
50) C220	Tetrachloroethene	0.00	166	0	N.D.	
51) C221	1,3-Dichloropropan	0.00	76	0	N.D.	
52) C155	Dibromochlorometha	0.00	129	0	N.D.	
53) C163	1,2-Dibromoethane	0.00	107	0	N.D.	
54) C215	2-Hexanone	7.36	43	129	N.D.	
55) C235	Chlorobenzene	0.00	112	0	N.D.	
56) C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.	
57) C240	Ethylbenzene	7.95	91	959	N.D.	
58) C246	m,p-Xylene	0.00	106	0	N.D.	
59) C247	o-Xylene	0.00	106	0	N.D.	
60) C245	Styrene	0.00	104	0	N.D.	
63) C180	Bromoform	0.00	173	0	N.D.	
64) C966	Isopropylbenzene	8.89	105	268	N.D.	
65) C301	Bromobenzene	0.00	156	0	N.D.	
66) C225	1,1,2,2-Tetrachlor	0.00	83	0	N.D.	
67) C282	1,2,3-Trichloropro	8.90	110	117	N.D.	
68) C283	t-1,4-Dichloro-2-B	0.00	53	0	N.D.	
69) C302	n-Propylbenzene	8.90	91	827	N.D.	
70) C303	2-Chlorotoluene	0.00	126	0	N.D.	
71) C289	4-Chlorotoluene	0.00	126	0	N.D.	
72) C304	1,3,5-Trimethylben	9.12	105	75	N.D.	
73) C306	tert-Butylbenzene	0.00	134	0	N.D.	
74) C307	1,2,4-Trimethylben	9.61	105	74	N.D.	
75) C308	sec-Butylbenzene	9.61	105	74	N.D.	
76) C260	1,3-Dichlorobenzen	0.00	146	0	N.D.	
77) C309	4-Isopropyltoluene	0.00	119	0	N.D.	
78) C267	1,4-Dichlorobenzen	0.00	146	0	N.D.	
79) C249	1,2-Dichlorobenzen	0.00	146	0	N.D.	
80) C310	n-Butylbenzene	10.08	91	78	N.D.	
81) C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.	
82) C313	1,2,4-Trichloroben	0.00	180	0	N.D.	
83) C316	Hexachlorobutadien	0.00	225	0	N.D.	
84) C314	Naphthalene	11.77	128	216	N.D.	
85) C934	1,2,3-Trichloroben	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

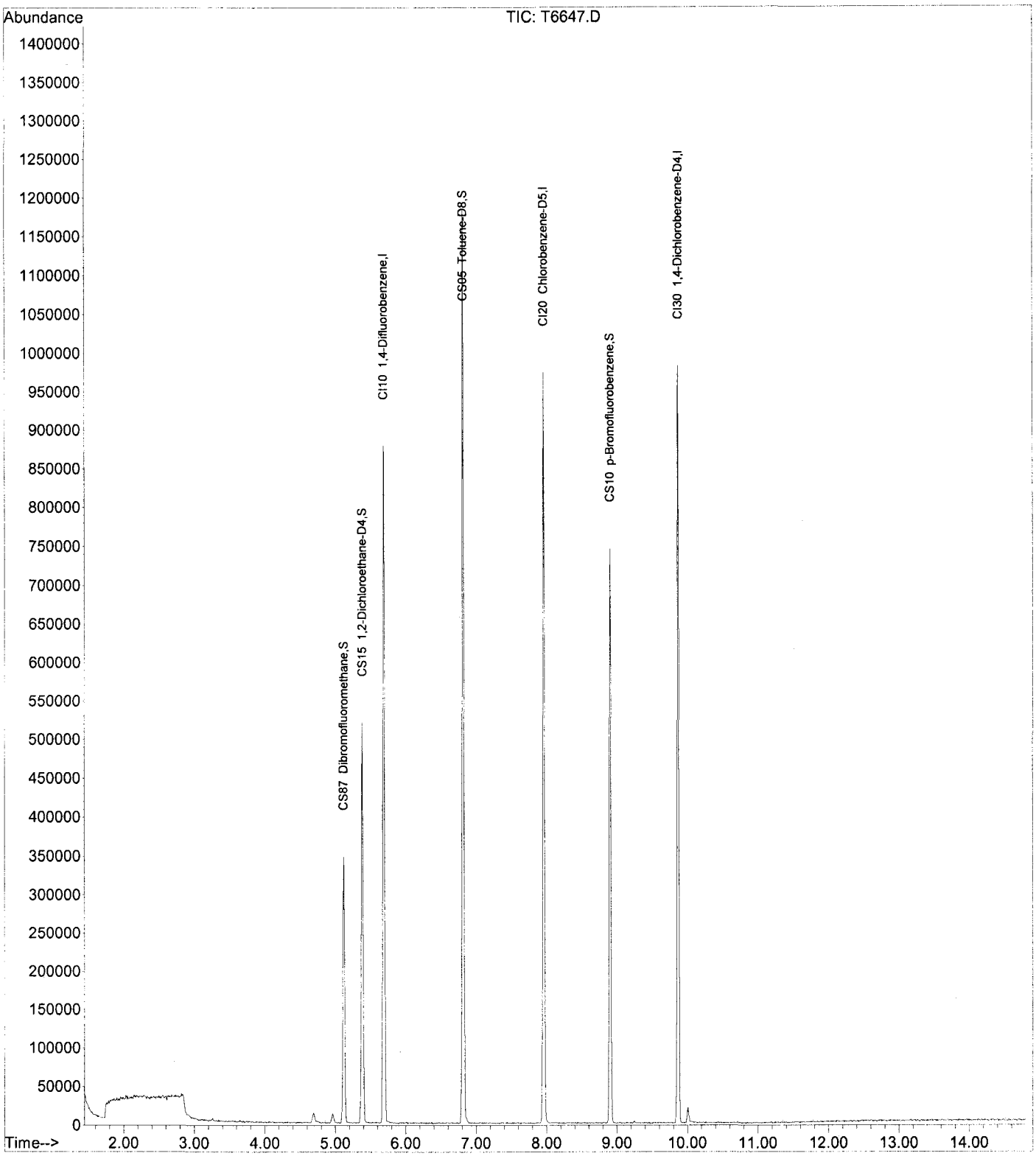
RJS 12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6647.D
Acq On : 3 Dec 2009 18:00
Sample : RSL0187-06
Misc :
MS Integration Params: RTEINT.P

Vial: 49
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 20:32:46 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 20:35:51 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Form 6

INITIAL CALIBRATION DATA

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis, Geraghty & Miller - NY9A8463

Calibration: R9L0204

Instrument: HP5975T

Calibration Date: 12/02/09 10:49

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1-Trichloroethane	1	0.3709254	5	0.4629645	10	0.4852853	25	0.5371865	50	0.4872013	100	0.5993221
1,1,2,2-Tetrachloroethane	1	0.8496262	5	0.9765874	10	1.087838	25	1.170018	50	1.119674	100	1.235338
1,1,2-Trichloro-1,2,2-trifluoroethar	1	0.2898428	5	0.2648792	10	0.282332	25	0.2883105	50	0.2266435	100	0.2951792
1,1,2-Trichloroethane	1	0.2835099	5	0.310301	10	0.3353271	25	0.3528411	50	0.3375276	100	0.3744436
1,1-Dichloroethane	1	0.7761477	5	0.8302768	10	0.8178688	25	0.8591148	50	0.7728787	100	0.879744
1,1-Dichloroethene	1	0.2908358	5	0.2927863	10	0.297677	25	0.2962259	50	0.2514396	100	0.3047828
1,2,4-Trichlorobenzene	1	1.051661	5	1.119187	10	1.088491	25	1.152706	50	1.077591	100	1.147821
1,2-Dibromo-3-chloropropane	1	0.1139307	5	0.1244774	10	0.1527837	25	0.1794996	50	0.1905372	100	0.2347903
1,2-Dibromoethane	1	0.2992913	5	0.3471159	10	0.3818432	25	0.4199045	50	0.4030257	100	0.4490561
1,2-Dichlorobenzene	1	1.469285	5	1.573949	10	1.587794	25	1.681544	50	1.576717	100	1.732984
1,2-Dichloroethane	1	0.6998773	5	0.7101046	10	0.7265542	25	0.7559172	50	0.7085152	100	0.7791175
1,2-Dichloroethane-d4	1	0.6544665	5	0.5379221	10	0.5179153	25	0.5558226	50	0.5491084	100	0.6104107
1,2-Dichloroethene, Total	2	0.3906519	10	0.3922459	20	0.3974864	50	0.4170466	100	0.3800487	200	0.4394042
1,2-Dichloropropane	1	0.3885704	5	0.4183644	10	0.419274	25	0.4487098	50	0.4262705	100	0.4867916
1,3-Dichlorobenzene	1	1.510681	5	1.586136	10	1.632093	25	1.696467	50	1.596494	100	1.782727
1,4-Dichlorobenzene	1	1.626809	5	1.628068	10	1.636855	25	1.716453	50	1.598103	100	1.763663
2-Butanone	5	0.4195597	25	0.3680249	50	0.4151957	125	0.4406822	250	0.4139181	500	0.4718044
2-Hexanone	5	0.5086944	25	0.5619112	50	0.6526567	125	0.6844058	250	0.6340584	500	0.7017785
4-Bromofluorobenzene	1	0.4536764	5	0.3960359	10	0.3676471	25	0.4214716	50	0.4169707	100	0.4724613
4-Methyl-2-pentanone	5	0.8231418	25	0.850804	50	0.9985153	125	1.062679	250	0.9896656	500	1.085672
Acetone	5	0.2999409	25	0.2493493	50	0.2875273	125	0.2912841	250	0.2513781	500	0.2767341
Benzene	1	1.441079	5	1.526805	10	1.516847	25	1.598592	50	1.469039	100	1.713077
Bromodichloromethane	1	0.2776976	5	0.3045709	10	0.340755	25	0.4145143	50	0.4319023	100	0.5228225
Bromoform	1	0.1362772	5	0.1824893	10	0.2185606	25	0.287661	50	0.3265909	100	0.4407258
Bromomethane	1	0.1894347	5	0.1868858	10	0.1551316	25	0.1710578	50	0.1498271	100	0.1511951
Carbon disulfide	1	0.662907	5	0.6433837	10	0.7532219	25	0.875581	50	0.811293	100	1.075166
Carbon Tetrachloride	1	0.287895	5	0.3223246	10	0.3370692	25	0.3951079	50	0.3728825	100	0.4909728
Chlorobenzene	1	0.9898394	5	1.036323	10	1.055376	25	1.09833	50	1.02885	100	1.170575
Chloroethane	1	0.2788052	5	0.213798	10	0.1948042	25	0.229832	50	0.1964187	100	0.1843171
Chloroform	1	0.6475918	5	0.6840629	10	0.7089253	25	0.7423837	50	0.6786957	100	0.7709075
Chloromethane	1	0.776797	5	0.7192046	10	0.7058077	25	0.7257128	50	0.6228868	100	0.6392313
cis-1,2-Dichloroethene	1	0.4104547	5	0.411715	10	0.4236999	25	0.4436376	50	0.4060576	100	0.4613407
cis-1,3-Dichloropropene	1	0.2738783	5	0.380026	10	0.4174124	25	0.5140408	50	0.5236918	100	0.6332279
Cyclohexane	1	0.8592546	5	0.7826191	10	0.8507006	25	0.8662872	50	0.7189902	100	0.9659297
Dibromochloromethane	1	0.1769731	5	0.1926348	10	0.2253122	25	0.2855612	50	0.3176499	100	0.3926
Dichlorodifluoromethane	1	0.3571761	5	0.3634061	10	0.3694637	25	0.3753497	50	0.2910674	100	0.3487404
Ethylbenzene	1	1.781277	5	1.865134	10	1.905099	25	2.005404	50	1.854314	100	2.160666
Isopropylbenzene	1	2.993336	5	3.288418	10	3.379621	25	3.581786	50	3.311996	100	3.86556
Methyl Acetate	1	1.131834	5	1.029906	10	1.170672	25	1.246836	50	1.133134	100	1.255012
Methylcyclohexane	1	0.6247527	5	0.5727858	10	0.6412954	25	0.6604956	50	0.5505517	100	0.7421221
Methylene Chloride	1	0.5455797	5	0.4608065	10	0.4387682	25	0.4361452	50	0.3858668	100	0.4316631
Methyl-t-Butyl Ether (MTBE)	1	1.271733	5	1.182301	10	1.283286	25	1.354949	50	1.233093	100	1.383729
Styrene	1	0.9171342	5	1.020041	10	1.056231	25	1.182413	50	1.153906	100	1.344122
Tetrachloroethene	1	0.3661982	5	0.4051241	10	0.407905	25	0.428548	50	0.3800711	100	0.4555363

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9L0204

SDG:

Project: Arcadis, Geraghty & Miller - NY9A8463

Instrument: HP5975T

Calibration Date: 12/02/09 10:49

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Toluene	1	0.9883268	5	1.03785	10	1.031174	25	1.073375	50	1.003428	100	1.177649
Toluene-d8	1	1.590086	5	1.447113	10	1.328239	25	1.557158	50	1.511729	100	1.757938
trans-1,2-Dichloroethene	1	0.370849	5	0.3727768	10	0.3712729	25	0.3904557	50	0.3540398	100	0.4174677
trans-1,3-Dichloropropene	1	0.300451	5	0.3953005	10	0.4637718	25	0.5559128	50	0.5733495	100	0.6903593
Trichloroethene	1	0.3617592	5	0.3803625	10	0.3777997	25	0.3930396	50	0.3558731	100	0.4154256
Trichlorofluoromethane	1	0.4870306	5	0.4585388	10	0.439785	25	0.4740922	50	0.3938773	100	0.4492373
Vinyl acetate	5	0.7368095	25	0.8146869	50	0.9868934	125	1.130115	250	1.129991	500	1.108265
Vinyl chloride	1	0.5758281	5	0.5037607	10	0.5054524	25	0.5080208	50	0.4150021	100	0.4425576
Xylenes, total	3	0.656414	15	0.7138664	30	0.7309133	75	0.7766841	150	0.7295038	300	0.8443468

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

SDG:

Client: ARCADIS U.S., Inc. - Albany, NY

Project: Arcadis, Geraghty & Miller - NY9A8463

Calibration: R9L0204

Instrument: HP5975T

Calibration Date: 12/02/09 10:49

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r^2	Quad COD	LIMIT	Q
1,1,1-Trichloroethane	0.4904809	15.55824	5.11	1.872938E-02	0.99426		0.99	
1,1,2,2-Tetrachloroethane	1.07318	13.00239	9.03	1.545367E-02			SPCC (0.3)	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2745312	9.354981	3.15	3.396095E-03			15	
1,1,2-Trichloroethane	0.3323251	9.609302	7.201667	5.503747E-02			15	
1,1-Dichloroethane	0.8226718	5.245247	4.25	0			SPCC (0.1)	
1,1-Dichloroethene	0.2889579	6.575486	3.158333	0.1289925			CCC (30)	
1,2,4-Trichlorobenzene	1.106243	3.654133	11.56167	3.244159E-02			15	
1,2-Dibromo-3-chloropropane	0.1660032	27.10983	10.89667	4.692014E-02	0.99169		0.99	
1,2-Dibromoethane	0.3833728	14.00883	7.62	1.739022E-02			15	
1,2-Dichlorobenzene	1.603712	5.762902	10.22	1.872938E-02			15	
1,2-Dichloroethane	0.7300143	4.27111	5.44	1.565306E-02			15	
1,2-Dichloroethane-d4	0.5709409	8.9794	5.381667	7.514701E-02			15	
1,2-Dichloroethene, Total	0.4028139	5.379345	4.733333	0.1089224			15	
1,2-Dichloropropane	0.4313301	7.721011	6.08	1.867383E-02			CCC (30)	
1,3-Dichlorobenzene	1.6341	5.801092	9.811667	0.0403705			15	
1,4-Dichlorobenzene	1.661659	3.844477	9.89	2.077931E-02			15	
2-Butanone	0.4215308	8.120819	4.746667	0.1089012			15	
2-Hexanone	0.6239175	11.94495	7.36	1.078331E-02			15	
4-Bromofluorobenzene	0.4213772	9.006386	8.903333	5.751258E-02			15	
4-Methyl-2-pentanone	0.968413	11.21036	6.72	1.146183E-02			15	
Acetone	0.2760356	7.696365	3.25	0			15	
Benzene	1.54424	6.398268	5.41	1.406038E-02			15	
Bromodichloromethane	0.3820438	23.97659	6.3	3.396095E-03	0.99305		0.99	
Bromoform	0.2653841	41.52459	8.676667	6.043421E-02		0.999661	SPCC (0.1)	
Bromomethane	0.1672553	10.69669	2.233333	0.365387			15	
Carbon disulfide	0.8035921	19.83192	3.363333	0.1538595		0.9985478	0.99	
Carbon Tetrachloride	0.3677087	19.3605	5.231667	7.656245E-02		0.9989278	0.99	
Chlorobenzene	1.063216	5.964698	7.98	1.012459E-02			SPCC (0.3)	
Chloroethane	0.2163292	15.98173	2.35	4.552213E-03	0.99722		0.99	
Chloroform	0.7054278	6.396931	4.99	1.990877E-02			CCC (30)	
Chloromethane	0.6982734	8.247433	1.72	1.882391E-02			SPCC (0.1)	
cis-1,2-Dichloroethene	0.4261509	5.150331	4.733333	0.1089224			15	
cis-1,3-Dichloropropene	0.4570462	27.63829	6.62	1.102654E-02	0.99344		0.99	
Cyclohexane	0.8406302	9.948231	5.138333	8.115094E-02			15	
Dibromochloromethane	0.2651219	31.1204	7.53	1.889235E-02		0.9997147	0.99	
Dichlorodifluoromethane	0.3508672	8.759323	1.526667	0.3385832			15	
Ethylbenzene	1.928649	7.01627	8.041667	0.0546695			CCC (30)	
Isopropylbenzene	3.403453	8.673462	8.75	0			15	
Methyl Acetate	1.161232	7.216467	3.55	1.691288E-02			15	
Methylcyclohexane	0.6320005	10.78227	6.018333	6.464839E-02			15	
Methylene Chloride	0.4498049	11.77216	3.651667	0.1100085			15	
Methyl-t-Butyl Ether (MTBE)	1.284849	5.830568	3.86	9.616491E-03			15	
Styrene	1.112308	13.34288	8.48	9.359097E-03			15	
Tetrachloroethene	0.4072305	7.929823	7.293333	7.060447E-02			15	
Toluene	1.051967	6.488094	6.87	1.583719E-02			CCC (30)	
Toluene-d8	1.532044	9.422307	6.811667	0.0585895			15	
trans-1,2-Dichloroethene	0.379477	5.770456	3.88	1.881332E-02			15	
trans-1,3-Dichloropropene	0.4965241	28.01776	7.05	0.0111506	0.99354		0.99	
Trichloroethene	0.38071	5.684526	5.893333	8.550669E-02			15	
Trichlorofluoromethane	0.4504269	7.213287	2.616667	0.1974528			15	

Form 6

INITIAL CALIBRATION DATA (Continued)

8260B

Laboratory: TestAmerica Buffalo

Client: ARCADIS U.S., Inc. - Albany, NY

Calibration: R9L0204

SDG:

Project: Arcadis, Geraghty & Miller - NY9A8463

Instrument: HP5975T

Calibration Date: 12/02/09 10:49

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r^2	Quad COD	LIMIT	Q
Vinyl acetate	0.9844602	17.46926	4.278334	9.455364E-02	0.99971		0.99	
Vinyl chloride	0.4917703	11.49443	1.85	1.260276E-02			CCC (30)	
Xylenes, total	0.7419547	8.53981	8.46	1.431517E-02			15	

Response Factor Report 5975 T

Method Path : C:\MSDCHEM\1\DATA\METHODS 2009\
Method File : R9L0204-6PT.M
Title : 8260 5ML
Last Update : Thu Dec 03 11:00:52 2009
Response Via : Initial Calibration

8260
(R9L0204)
-SCV OR-

Calibration Files
1 =T6618.D 2 =T6619.D 3 =T6620.D
4 =T6621.D 5 =T6622.D 6 =T6623.D

			Compound	1	2	3	4	5	6	Avg	%RSD
1)	I	CI10	1,4-Difluoroben	ISTD							
2)	T	C290	Dichlorodiflu	0.357	0.363	0.369	0.375	0.291	0.349	0.351	8.76
3)	T	C010	Chloromethane	0.777	0.719	0.706	0.726	0.623	0.639	0.698	8.25
4)	T	C020	Vinyl chlorid	0.576	0.504	0.505	0.508	0.415	0.443	0.492	11.49
5)	T	C015	Bromomethane	0.189	0.187	0.155	0.171	0.150	0.151	0.167	10.70
6)	T	C025	Chloroethane	0.279	0.214	0.195	0.230	0.196	0.184	-----	
									LO M=	0.191 R=0.994	
7)	T	C275	Trichlorofluo	0.487	0.459	0.440	0.474	0.394	0.449	0.450	7.21
8)	T	C045	1,1-Dichloroe	0.291	0.293	0.298	0.296	0.251	0.305	0.289	6.58
9)	T	C030	Methylene chl	0.546	0.461	0.439	0.436	0.386	0.432	0.450	11.77
10)	T	C040	Carbon disulf	0.663	0.643	0.753	0.876	0.811	1.075	-----	
									QO A=	0.095 R=0.997	
									B=	0.690	
11)	T	C036	Acrolein	0.015	0.014	0.015	0.016	0.015	0.016	0.015	5.18
12)	T	C038	Acrylonitrile	0.276	0.263	0.302	0.318	0.294	0.330	0.297	8.49
13)	T	C035	Acetone	0.300	0.249	0.288	0.291	0.251	0.277	0.276	7.70
14)	T	C300	Acetonitrile	0.109	0.101	0.113	0.111	0.089	0.116	0.107	9.11
15)	T	C276	Iodomethane	0.403	0.373	0.405	0.408	0.355	0.410	0.392	5.73
16)	T	C291	1,1,2 Trichlo	0.290	0.265	0.282	0.288	0.227	0.295	0.275	9.35
17)	T	C962	T-butyl Methy	1.272	1.182	1.283	1.355	1.233	1.384	1.285	5.83
18)	T	C057	trans-1,2-Dic	0.371	0.373	0.371	0.390	0.354	0.417	0.379	5.77
19)	T	C255	Methyl Acetat	1.132	1.030	1.171	1.247	1.133	1.255	1.161	7.22
20)	T	C050	1,1-Dichloroe	0.776	0.830	0.818	0.859	0.773	0.880	0.823	5.25
21)	T	C125	Vinyl Acetate	0.737	0.815	0.987	1.130	1.130	1.108	-----	
									LO M=	1.113 R=1.000	
22)	T	C051	2,2-Dichlorop	0.371	0.386	0.382	0.408	0.368	0.432	0.391	6.26
23)	T	C056	cis-1,2-Dichl	0.410	0.412	0.424	0.444	0.406	0.461	0.426	5.15
24)	T	C272	Tetrahydrofur	0.333	0.263	0.291	0.307	0.284	0.319	0.299	8.45
25)	T	C222	Bromochlorome	0.190	0.190	0.201	0.206	0.195	0.216	0.199	5.17
26)	T	C060	Chloroform	0.648	0.684	0.709	0.742	0.679	0.771	0.705	6.40
27)	T	C115	1,1,1-Trichlo	0.371	0.463	0.485	0.537	0.487	0.599	-----	
									LO M=	0.572 R=0.992	
28)	T	C120	Carbon tetrac	0.288	0.322	0.337	0.395	0.373	0.491	-----	
									QO A=	0.044 R=0.998	
									B=	0.314	
29)	T	C116	1,1-Dichlorop	0.487	0.523	0.525	0.546	0.489	0.605	0.529	8.24
30)	S	CS87	Dibromofluoro	0.338	0.323	0.306	0.362	0.350	0.402	0.347	9.67
31)	S	CS15	1,2-Dichloroe	0.654	0.538	0.518	0.556	0.549	0.610	0.571	8.98
32)	T	C165	Benzene	1.441	1.527	1.517	1.599	1.469	1.713	1.544	6.40
33)	T	C065	1,2-Dichloroe	0.700	0.710	0.727	0.756	0.709	0.779	0.730	4.27
34)	T	C110	2-Butanone	0.420	0.368	0.415	0.441	0.414	0.472	0.422	8.12
35)	T	C256	Cyclohexane	0.859	0.783	0.851	0.866	0.719	0.966	0.841	9.95
36)	T	C150	Trichloroethe	0.362	0.380	0.378	0.393	0.356	0.415	0.381	5.68
37)	T	C140	1,2-Dichlorop	0.389	0.418	0.419	0.449	0.426	0.487	0.431	7.72
38)	T	C278	Dibromomethan	0.205	0.224	0.234	0.257	0.247	0.275	0.240	10.32
39)	T	C130	Bromodichloro	0.278	0.305	0.341	0.415	0.432	0.523	-----	
									LO M=	0.495 R=0.992	
40)	T	C161	2-Chloroethyl	0.208	0.239	0.272	0.307	0.303	0.368	-----	
									LO M=	0.350 R=0.993	
41)	T	C012	Methylcycolhe	0.625	0.573	0.641	0.660	0.551	0.742	0.632	10.78
42)	T	C145	cis-1,3-Dichl	0.274	0.380	0.417	0.514	0.524	0.633	-----	
									LO M=	0.601 R=0.993	
43)	I	CI20	Chlorobenzene-D	ISTD							
44)	S	CS05	Toluene-D8	1.590	1.447	1.328	1.557	1.512	1.758	1.532	9.42
45)	T	C230	Toluene	0.988	1.038	1.031	1.073	1.003	1.178	1.052	6.49

Response Factor Report 5975 T

Method Path : C:\MSDCHEM\1\DATA\METHODS 2009\
Method File : R9L0204-6PT.M
Title : 8260 5ML
Last Update : Thu Dec 03 11:00:52 2009
Response Via : Initial Calibration

Calibration Files
1 =T6618.D 2 =T6619.D 3 =T6620.D
4 =T6621.D 5 =T6622.D 6 =T6623.D

46)	T	C170	trans-1,3-Dic	0.300	0.395	0.464	0.556	0.573	0.690	-----		
									LO	M= 0.655	R=0.993	
47)	T	C284	Ethyl Methacr	0.406	0.463	0.530	0.587	0.577	0.658	-----		
									LO	M= 0.636	R=0.997	
48)	T	C160	1,1,2-Trichlo	0.284	0.310	0.335	0.353	0.338	0.374	0.332	9.61	
49)	T	C210	4-Methyl-2-pe	0.823	0.851	0.999	1.063	0.990	1.086	0.968	11.21	
50)	T	C220	Tetrachloroet	0.366	0.405	0.408	0.429	0.380	0.456	0.407	7.93	
51)	T	C221	1,3-Dichlorop	0.617	0.670	0.700	0.726	0.693	0.776	0.697	7.64	
52)	T	C155	Dibromochloro	0.177	0.193	0.225	0.286	0.318	0.393	-----		
									QO	A= 0.037	R=1.000	
										B= 0.243		
53)	T	C163	1,2-Dibromoet	0.299	0.347	0.382	0.420	0.403	0.449	0.383	14.01	
54)	T	C215	2-Hexanone	0.509	0.562	0.653	0.684	0.634	0.702	0.624	11.94	
55)	T	C235	Chlorobenzene	0.990	1.036	1.055	1.098	1.029	1.171	1.063	5.96	
56)	T	C281	1,1,1,2-Tetra	0.225	0.290	0.317	0.367	0.361	0.423	-----		
									LO	M= 0.406	R=0.995	
57)	T	C240	Ethylbenzene	1.781	1.865	1.905	2.005	1.854	2.161	1.929	7.02	
58)	T	C246	m,p-Xylene	0.655	0.716	0.735	0.775	0.729	0.852	0.744	8.84	
59)	T	C247	o-Xylene	0.659	0.710	0.723	0.781	0.730	0.829	0.738	8.00	
60)	T	C245	Styrene	0.917	1.020	1.056	1.182	1.154	1.344	1.112	13.34	
61)	S	CS10	p-Bromofluoro	0.454	0.396	0.368	0.421	0.417	0.472	0.421	9.01	
62)	I	CI30	1,4-Dichloroben	----------	----------	----------	ISTD	----------	----------	----------		
63)	T	C180	Bromoform	0.136	0.182	0.219	0.288	0.327	0.441	-----		
									QO	A= 0.054	R=1.000	
										B= 0.223		
64)	T	C966	Isopropylbenz	2.993	3.288	3.380	3.582	3.312	3.866	3.403	8.67	
65)	T	C301	Bromobenzene	0.729	0.818	0.824	0.878	0.822	0.916	0.831	7.62	
66)	T	C225	1,1,2,2-Tetra	0.850	0.977	1.088	1.170	1.120	1.235	1.073	13.00	
67)	T	C282	1,2,3-Trichlo	0.337	0.318	0.365	0.375	0.347	0.381	0.354	6.87	
68)	T	C283	t-1,4-Dichlor	0.108	0.116	0.179	0.230	0.242	0.292	-----		
									LO	M= 0.276	R=0.993	
69)	T	C302	n-Propylbenze	3.710	4.187	4.346	4.662	4.301	5.036	4.374	10.24	
70)	T	C303	2-Chlorotolue	0.681	0.795	0.827	0.854	0.790	0.877	0.804	8.56	
71)	T	C289	4-Chlorotolue	0.719	0.787	0.800	0.858	0.791	0.887	0.807	7.33	
72)	T	C304	1,3,5-Trimeth	2.619	2.869	3.020	3.240	3.001	3.437	3.031	9.40	
73)	T	C306	tert-Butylben	0.431	0.529	0.547	0.605	0.572	0.664	0.558	14.04	
74)	T	C307	1,2,4-Trimeth	2.594	3.004	3.070	3.322	3.103	3.528	3.104	10.18	
75)	T	C308	sec-Butylbenz	3.107	3.610	3.734	4.071	3.745	4.493	3.793	12.24	
76)	T	C260	1,3-Dichlorob	1.511	1.586	1.632	1.696	1.596	1.783	1.634	5.80	
77)	T	C309	4-Isopropylto	2.466	2.845	2.968	3.222	3.002	3.574	3.013	12.31	
78)	T	C267	1,4-Dichlorob	1.627	1.628	1.637	1.716	1.598	1.764	1.662	3.84	
79)	T	C249	1,2-Dichlorob	1.469	1.574	1.588	1.682	1.577	1.733	1.604	5.76	
80)	T	C310	n-Butylbenzen	2.729	2.971	3.041	3.228	2.979	3.506	3.076	8.61	
81)	T	C286	1,2-Dibromo-3	0.114	0.124	0.153	0.179	0.191	0.235	-----		
									LO	M= 0.221	R=0.991	
82)	T	C313	1,2,4-Trichlo	1.052	1.119	1.088	1.153	1.078	1.148	1.106	3.65	
83)	T	C316	Hexachlorobut	0.495	0.541	0.544	0.569	0.509	0.591	0.541	6.60	
84)	T	C314	Naphthalene	2.853	2.983	3.296	3.511	3.373	3.637	3.276	9.26	
85)	T	C934	1,2,3-Trichlo	1.026	1.007	1.040	1.102	1.038	1.100	1.052	3.78	

Total Average %RSD 8.27

L = Linear LO = Linear+Origin Q = Quad QO = Quad+Origin R = Corr. Coef
(#) = Out of Range

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6618.D
Acq On : 3 Dec 2009 00:41
Sample : RL90211-CAL1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:44:58 2009

Vial: 20
Operator: TWS
Inst : 5975 T
Multiplr: 1.00
Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	654579	25.00	ug/L	0.00 99.26%
43) CI20	Chlorobenzene-D5	7.96	117	495838	25.00	ug/L	0.00 93.39%
62) CI30	1,4-Dichlorobenzene-	9.87	152	272973	25.00	ug/L	0.00 95.90%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	8846	0.97	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	3.88%#	
31) CS15	1,2-Dichloroethane-D	5.38	65	17136	1.15	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	4.60%#	
44) CS05	Toluene-D8	6.81	98	31537	1.04	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	4.16%#	
61) CS10	p-Bromofluorobenzene	8.90	174	8998	1.08	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	4.32%#	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.53	85	9352	1.02	ug/L	89
3) C010	Chloromethane	1.72	50	20339	1.11	ug/L	100
4) C020	Vinyl chloride	1.85	62	15077	1.17	ug/L	96
5) C015	Bromomethane	2.22	94	4960	1.13	ug/L #	75
6) C025	Chloroethane	2.35	64	7300	1.29	ug/L	88
7) C275	Trichlorofluorometha	2.62	101	12752	1.08	ug/L	89
8) C045	1,1-Dichloroethene	3.15	96	7615	1.01	ug/L	97
9) C030	Methylene chloride	3.65	84	14285	1.21	ug/L	97
10) C040	Carbon disulfide	3.36	76	17357	0.82	ug/L	99
11) C036	Acrolein	3.09	56	8030	20.08	ug/L	98
12) C038	Acrylonitrile	3.89	53	36158	4.65	ug/L	95
13) C035	Acetone	3.25	43	39267	5.43	ug/L	95
14) C300	Acetonitrile	3.54	41	114372	40.96	ug/L	98
15) C276	Iodomethane	3.32	142	10539	1.03	ug/L	91
16) C291	1,1,2 Trichloro-1,2,	3.15	101	7589	1.06	ug/L	97
17) C962	T-butyl Methyl Ether	3.86	73	33298	0.99	ug/L	98
18) C057	trans-1,2-Dichloroet	3.88	96	9710	0.98	ug/L	92
19) C255	Methyl Acetate	3.55	43	29635	0.97	ug/L	98
20) C050	1,1-Dichloroethane	4.25	63	20322	0.94	ug/L	90
21) C125	Vinyl Acetate	4.28	43	96460	3.74	ug/L	99
22) C051	2,2-Dichloropropane	4.71	77	9717	0.95	ug/L	99
23) C056	cis-1,2-Dichloroethe	4.73	96	10747	0.96	ug/L	97
24) C272	Tetrahydrofuran	4.96	42	43581	5.56	ug/L	97
25) C222	Bromochloromethane	4.94	128	4962	0.95	ug/L #	92
26) C060	Chloroform	4.99	83	16956	0.92	ug/L	95
27) C115	1,1,1-Trichloroethan	5.11	97	9712	0.76	ug/L	89
28) C120	Carbon tetrachloride	5.24	117	7538	0.78	ug/L #	63
29) C116	1,1-Dichloropropene	5.23	75	12742	0.92	ug/L	86
32) C165	Benzene	5.41	78	37732	0.93	ug/L	99
33) C065	1,2-Dichloroethane	5.44	62	18325	0.96	ug/L	98
34) C110	2-Butanone	4.75	43	54927	4.97	ug/L	95
35) C256	Cyclohexane	5.14	56	22498	1.02	ug/L	98
36) C150	Trichloroethene	5.90	95	9472	0.95	ug/L	97
37) C140	1,2-Dichloropropane	6.08	63	10174	0.90	ug/L	95
38) C278	Dibromomethane	6.19	93	5376	0.85	ug/L	95

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6618.D
Acq On : 3 Dec 2009 00:41
Sample : RL90211-CAL1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:44:58 2009

Vial: 20
Operator: TWS
Inst : 5975 T
Multiplr: 1.00
Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	7271	0.73	ug/L		93
40) C161	2-Chloroethylvinyl E	6.50	63	27173	3.67	ug/L		94
41) C012	Methylcycolhexane	6.02	83	16358	0.99	ug/L		92
42) C145	cis-1,3-Dichloroprop	6.62	75	7171	0.60	ug/L		90
45) C230	Toluene	6.87	92	19602	0.94	ug/L		94
46) C170	trans-1,3-Dichloropr	7.05	75	5959	0.61	ug/L		94
47) C284	Ethyl Methacrylate	7.07	69	8045	0.76	ug/L	#	70
48) C160	1,1,2-Trichloroethan	7.20	83	5623	0.85	ug/L		89
49) C210	4-Methyl-2-pentanone	6.72	43	81629	4.25	ug/L		97
50) C220	Tetrachloroethene	7.29	166	7263	0.90	ug/L	#	78
51) C221	1,3-Dichloropropane	7.34	76	12238	0.89	ug/L		96
52) C155	Dibromochloromethane	7.53	129	3510	0.67	ug/L		84
53) C163	1,2-Dibromoethane	7.62	107	5936	0.78	ug/L		92
54) C215	2-Hexanone	7.36	43	50446	4.08	ug/L		97
55) C235	Chlorobenzene	7.98	112	19632	0.93	ug/L		95
56) C281	1,1,1,2-Tetrachloroe	8.05	131	4467	0.68	ug/L	#	83
57) C240	Ethylbenzene	8.04	91	35329	0.92	ug/L		96
58) C246	m,p-Xylene	8.13	106	25993	1.76	ug/L		99
59) C247	o-Xylene	8.46	106	13064	0.89	ug/L		88
60) C245	Styrene	8.48	104	18190	0.82	ug/L		90
63) C180	Bromoform	8.68	173	1488	0.51	ug/L		88
64) C966	Isopropylbenzene	8.75	105	32684	0.88	ug/L		97
65) C301	Bromobenzene	9.04	156	7960	0.88	ug/L		99
66) C225	1,1,2,2-Tetrachloroe	9.03	83	9277	0.79	ug/L		96
67) C282	1,2,3-Trichloropropa	9.08	110	3677	0.95	ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.07	53	5884	2.77	ug/L	#	19
69) C302	n-Propylbenzene	9.08	91	40505	0.85	ug/L		100
70) C303	2-Chlorotoluene	9.19	126	7437	0.85	ug/L		100
71) C289	4-Chlorotoluene	9.27	126	7847	0.89	ug/L		100
72) C304	1,3,5-Trimethylbenze	9.22	105	28594	0.86	ug/L		93
73) C306	tert-Butylbenzene	9.50	134	4705	0.77	ug/L		100
74) C307	1,2,4-Trimethylbenze	9.54	105	28320	0.84	ug/L		99
75) C308	sec-Butylbenzene	9.68	105	33930	0.82	ug/L		94
76) C260	1,3-Dichlorobenzene	9.82	146	16495	0.92	ug/L		93
77) C309	4-Isopropyltoluene	9.79	119	26931	0.82	ug/L		99
78) C267	1,4-Dichlorobenzene	9.89	146	17763	0.98	ug/L		94
79) C249	1,2-Dichlorobenzene	10.22	146	16043	0.92	ug/L		92
80) C310	n-Butylbenzene	10.14	91	29795	0.89	ug/L		98
81) C286	1,2-Dibromo-3-Chloro	10.90	75	1244	0.69	ug/L	#	78
82) C313	1,2,4-Trichlorobenze	11.57	180	11483	0.95	ug/L		95
83) C316	Hexachlorobutadiene	11.68	225	5408	0.91	ug/L		100
84) C314	Naphthalene	11.78	128	31153	0.87	ug/L		100
85) C934	1,2,3-Trichlorobenze	11.98	180	11206	0.98	ug/L		96

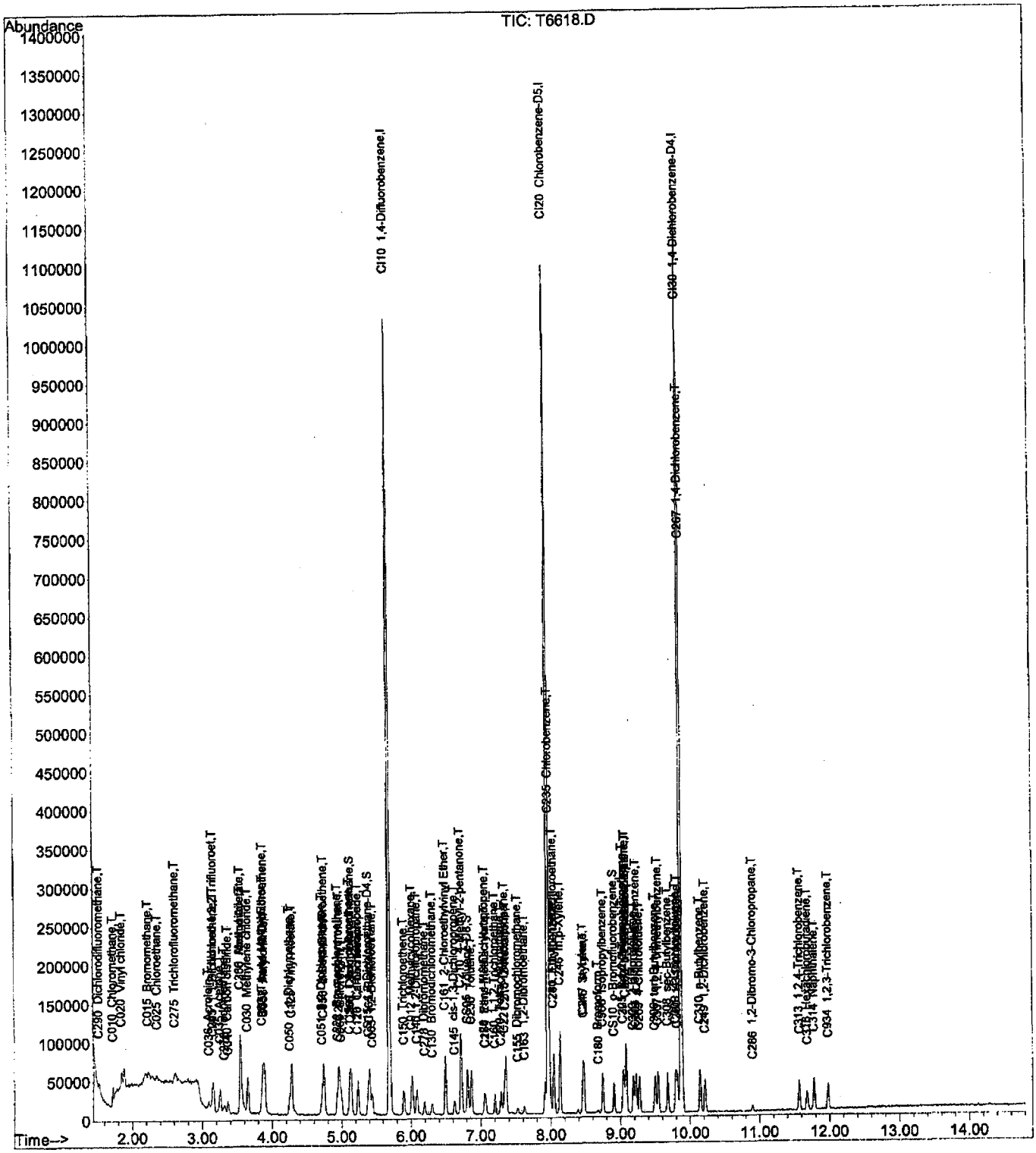
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6618.D
Acq On : 3 Dec 2009 00:41
Sample : RL90211-CAL1
Misc :
MS Integration Params: RTEINT.P

Vial: 20
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 10:44:58 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6619.D
Acq On : 3 Dec 2009 1:05
Sample : RL90211-CAL2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:14 2009

Vial: 21
Operator: TWS
Inst : 5975 T
Multiplr: 1.00
Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	683519	25.00	ug/L	0.00 103.65%
43) CI20	Chlorobenzene-D5	7.96	117	530356	25.00	ug/L	0.00 99.89%
62) CI30	1,4-Dichlorobenzene-	9.87	152	283907	25.00	ug/L	0.00 99.74%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	44120	4.65	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	18.60%#	
31) CS15	1,2-Dichloroethane-D	5.38	65	73536	4.71	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	18.84%#	
44) CS05	Toluene-D8	6.81	98	153497	4.72	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	18.88%#	
61) CS10	p-Bromofluorobenzene	8.90	174	42008	4.70	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	18.80%#	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.53	85	49679	5.18	ug/L	96
3) C010	Chloromethane	1.72	50	98318	5.15	ug/L	100
4) C020	Vinyl chloride	1.85	62	68866	5.12	ug/L	92
5) C015	Bromomethane	2.23	94	25548	5.59	ug/L	80
6) C025	Chloroethane	2.35	64	29227	4.94	ug/L	93
7) C275	Trichlorofluorometha	2.62	101	62684	5.09	ug/L	100
8) C045	1,1-Dichloroethene	3.16	96	40025	5.07	ug/L	98
9) C030	Methylene chloride	3.65	84	62994	5.12	ug/L	90
10) C040	Carbon disulfide	3.36	76	87953	4.00	ug/L	99
11) C036	Acrolein	3.09	56	38280	91.67	ug/L	99
12) C038	Acrylonitrile	3.89	53	179713	22.12	ug/L	98
13) C035	Acetone	3.25	43	170435	22.58	ug/L	98
14) C300	Acetonitrile	3.54	41	554577	190.21	ug/L	100
15) C276	Iodomethane	3.32	142	51037	4.76	ug/L	100
16) C291	1,1,2 Trichloro-1,2,	3.15	101	36210	4.82	ug/L	98
17) C962	T-butyl Methyl Ether	3.86	73	161625	4.60	ug/L	99
18) C057	trans-1,2-Dichloroet	3.88	96	50960	4.91	ug/L	99
19) C255	Methyl Acetate	3.55	43	140792	4.43	ug/L	99
20) C050	1,1-Dichloroethane	4.25	63	113502	5.05	ug/L	95
21) C125	Vinyl Acetate	4.28	43	556854	20.69	ug/L	100
22) C051	2,2-Dichloropropane	4.72	77	52774	4.93	ug/L	97
23) C056	cis-1,2-Dichloroethe	4.73	96	56283	4.83	ug/L	96
24) C272	Tetrahydrofuran	4.96	42	179592	21.93	ug/L	97
25) C222	Bromochloromethane	4.94	128	25930	4.76	ug/L	96
26) C060	Chloroform	4.99	83	93514	4.85	ug/L	98
27) C115	1,1,1-Trichloroethan	5.11	97	63289	4.72	ug/L	99
28) C120	Carbon tetrachloride	5.23	117	44063	4.38	ug/L	98
29) C116	1,1-Dichloropropene	5.23	75	71436	4.94	ug/L	97
32) C165	Benzene	5.41	78	208720	4.94	ug/L	95
33) C065	1,2-Dichloroethane	5.44	62	97074	4.86	ug/L	97
34) C110	2-Butanone	4.75	43	251552	21.82	ug/L	99
35) C256	Cyclohexane	5.13	56	106987	4.65	ug/L	99
36) C150	Trichloroethene	5.89	95	51997	5.00	ug/L	97
37) C140	1,2-Dichloropropane	6.08	63	57192	4.85	ug/L	95
38) C278	Dibromomethane	6.19	93	30555	4.65	ug/L	97

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6619.D
Acq On : 3 Dec 2009 1:05
Sample : RL90211-CAL2
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:14 2009

Vial: 21
Operator: TWS
Inst : 5975 T
Multiplr: 1.00
Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	41636	3.99 ug/L	97
40) C161	2-Chloroethylvinyl E	6.50	63	163041	21.09 ug/L	99
41) C012	Methylcycolhexane	6.01	83	78302	4.53 ug/L	96
42) C145	cis-1,3-Dichloroprop	6.62	75	51951	4.16 ug/L	96
45) C230	Toluene	6.87	92	110086	4.93 ug/L	92
46) C170	trans-1,3-Dichloropr	7.05	75	41930	3.98 ug/L	97
47) C284	Ethyl Methacrylate	7.07	69	49098	4.31 ug/L #	83
48) C160	1,1,2-Trichloroethan	7.20	83	32914	4.67 ug/L	97
49) C210	4-Methyl-2-pentanone	6.72	43	451229	21.96 ug/L	98
50) C220	Tetrachloroethene	7.29	166	42972	4.97 ug/L	99
51) C221	1,3-Dichloropropane	7.34	76	71050	4.81 ug/L	99
52) C155	Dibromochloromethane	7.53	129	20433	3.63 ug/L	88
53) C163	1,2-Dibromoethane	7.62	107	36819	4.53 ug/L	98
54) C215	2-Hexanone	7.36	43	298013	22.52 ug/L	99
55) C235	Chlorobenzene	7.98	112	109924	4.87 ug/L	96
56) C281	1,1,1,2-Tetrachloroe	8.05	131	30802	4.39 ug/L	93
57) C240	Ethylbenzene	8.04	91	197837	4.84 ug/L	99
58) C246	m,p-Xylene	8.13	106	151887	9.63 ug/L	97
59) C247	o-Xylene	8.46	106	75275	4.81 ug/L	92
60) C245	Styrene	8.48	104	108197	4.59 ug/L	97
63) C180	Bromoform	8.67	173	10362	3.44 ug/L	96
64) C966	Isopropylbenzene	8.75	105	186721	4.83 ug/L	98
65) C301	Bromobenzene	9.04	156	46466	4.92 ug/L	94
66) C225	1,1,2,2-Tetrachloroe	9.03	83	55452	4.55 ug/L	97
67) C282	1,2,3-Trichloropropa	9.08	110	18055	4.49 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.07	53	32950	14.93 ug/L #	20
69) C302	n-Propylbenzene	9.08	91	237727	4.79 ug/L	99
70) C303	2-Chlorotoluene	9.19	126	45135	4.94 ug/L	100
71) C289	4-Chlorotoluene	9.27	126	44672	4.88 ug/L	100
72) C304	1,3,5-Trimethylbenze	9.22	105	162920	4.73 ug/L	99
73) C306	tert-Butylbenzene	9.50	134	30046	4.74 ug/L	100
74) C307	1,2,4-Trimethylbenze	9.54	105	170583	4.84 ug/L	100
75) C308	sec-Butylbenzene	9.68	105	205005	4.76 ug/L	100
76) C260	1,3-Dichlorobenzene	9.81	146	90063	4.85 ug/L	98
77) C309	4-Isopropyltoluene	9.79	119	161560	4.72 ug/L	98
78) C267	1,4-Dichlorobenzene	9.89	146	92444	4.90 ug/L	98
79) C249	1,2-Dichlorobenzene	10.22	146	89371	4.91 ug/L	99
80) C310	n-Butylbenzene	10.14	91	168674	4.83 ug/L	99
81) C286	1,2-Dibromo-3-Chloro	10.89	75	7068	3.75 ug/L #	74
82) C313	1,2,4-Trichlorobenze	11.56	180	63549	5.06 ug/L	94
83) C316	Hexachlorobutadiene	11.68	225	30709	4.99 ug/L	96
84) C314	Naphthalene	11.78	128	169402	4.55 ug/L	100
85) C934	1,2,3-Trichlorobenze	11.98	180	57158	4.78 ug/L	98

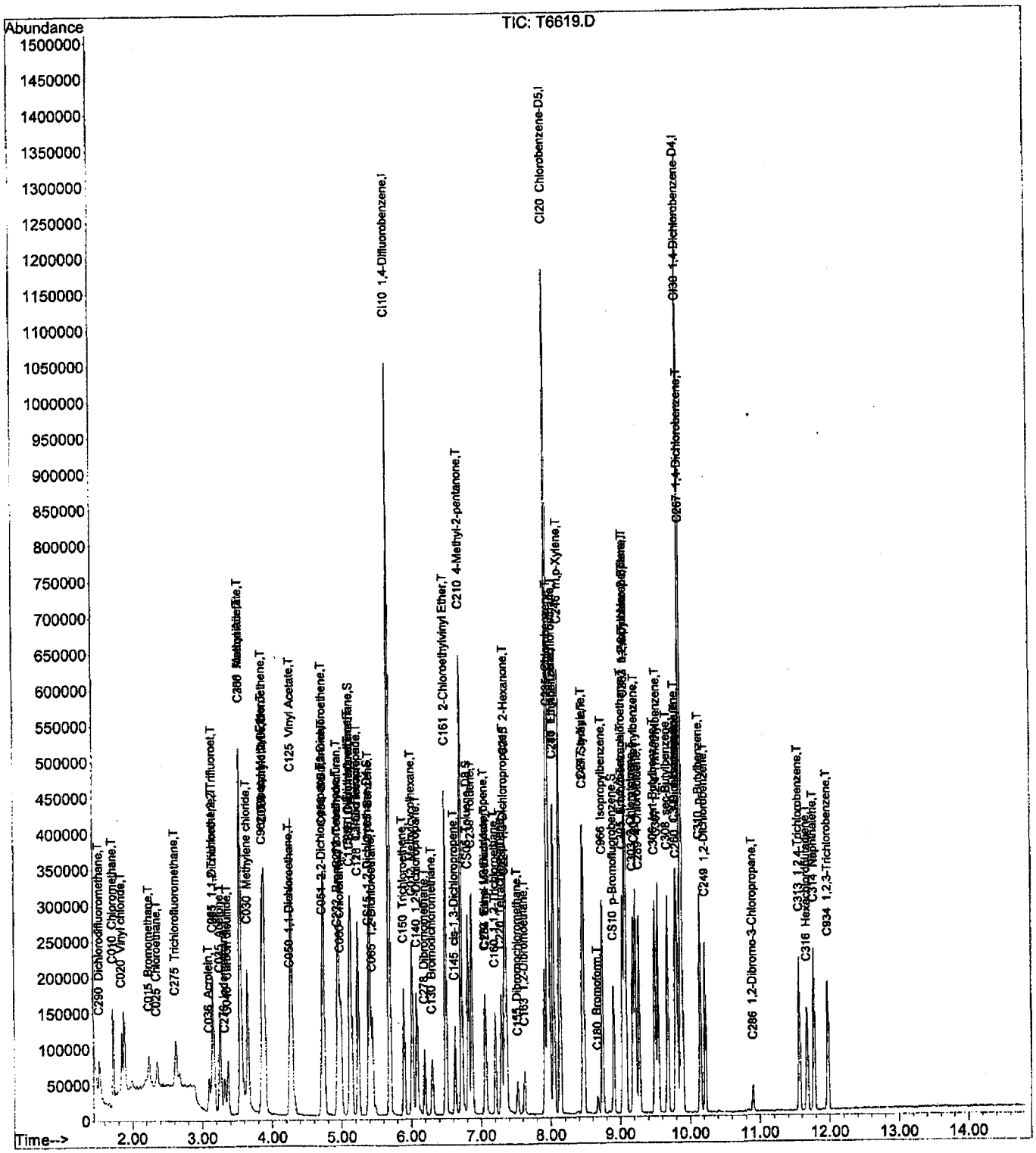
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6619.D
Acq On : 3 Dec 2009 1:05
Sample : RL90211-CAL2
Misc :
MS Integration Params: RTEINT.P

Vial: 21
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 10:45:14 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6620.D
Acq On : 3 Dec 2009 1:29
Sample : RL90211-CAL3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:28 2009

Vial: 22
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	668787	25.00	ug/L	0.00 101.41%
43) CI20	Chlorobenzene-D5	7.96	117	514930	25.00	ug/L	0.00 96.99%
62) CI30	1,4-Dichlorobenzene-	9.87	152	271904	25.00	ug/L	0.00 95.52%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	81856	8.82	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	35.28%#	
31) CS15	1,2-Dichloroethane-D	5.38	65	138550	9.07	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	36.28%#	
44) CS05	Toluene-D8	6.81	98	273580	8.67	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	34.68%#	
61) CS10	p-Bromofluorobenzene	8.90	174	75725	8.72	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	34.88%#	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.53	85	98837	10.53	ug/L	98
3) C010	Chloromethane	1.72	50	188814	10.11	ug/L	100
4) C020	Vinyl chloride	1.85	62	135216	10.28	ug/L	97
5) C015	Bromomethane	2.24	94	41500	9.28	ug/L	91
6) C025	Chloroethane	2.35	64	52113	9.00	ug/L	100
7) C275	Trichlorofluorometha	2.61	101	117649	9.76	ug/L	96
8) C045	1,1-Dichloroethene	3.16	96	79633	10.30	ug/L	93
9) C030	Methylene chloride	3.65	84	117377	9.75	ug/L	96
10) C040	Carbon disulfide	3.37	76	201498	9.37	ug/L	99
11) C036	Acrolein	3.10	56	81764	200.12	ug/L	100
12) C038	Acrylonitrile	3.89	53	403403	50.75	ug/L	98
13) C035	Acetone	3.25	43	384589	52.08	ug/L	99
14) C300	Acetonitrile	3.54	41	1213822	425.48	ug/L	100
15) C276	Iodomethane	3.31	142	108229	10.31	ug/L	98
16) C291	1,1,2 Trichloro-1,2,	3.15	101	75528	10.28	ug/L	97
17) C962	T-butyl Methyl Ether	3.86	73	343298	9.99	ug/L	99
18) C057	trans-1,2-Dichloroet	3.88	96	99321	9.78	ug/L	96
19) C255	Methyl Acetate	3.55	43	313172	10.08	ug/L	100
20) C050	1,1-Dichloroethane	4.25	63	218792	9.94	ug/L	97
21) C125	Vinyl Acetate	4.28	43	1320043	50.12	ug/L	100
22) C051	2,2-Dichloropropane	4.71	77	102268	9.77	ug/L	96
23) C056	cis-1,2-Dichloroethe	4.73	96	113346	9.94	ug/L	96
24) C272	Tetrahydrofuran	4.96	42	389611	48.63	ug/L	99
25) C222	Bromochloromethane	4.94	128	53650	10.06	ug/L	98
26) C060	Chloroform	4.99	83	189648	10.05	ug/L	96
27) C115	1,1,1-Trichloroethan	5.11	97	129821	9.89	ug/L	98
28) C120	Carbon tetrachloride	5.23	117	90171	9.17	ug/L	98
29) C116	1,1-Dichloropropene	5.23	75	140440	9.93	ug/L	99
32) C165	Benzene	5.41	78	405779	9.82	ug/L	97
33) C065	1,2-Dichloroethane	5.44	62	194364	9.95	ug/L	99
34) C110	2-Butanone	4.75	43	555355	49.23	ug/L	100
35) C256	Cyclohexane	5.14	56	227575	10.12	ug/L	99
36) C150	Trichloroethene	5.89	95	101067	9.92	ug/L	97
37) C140	1,2-Dichloropropane	6.08	63	112162	9.72	ug/L	99
38) C278	Dibromomethane	6.19	93	62516	9.73	ug/L	97

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6620.D
Acq On : 3 Dec 2009 1:29
Sample : RL90211-CAL3
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:28 2009

Vial: 22
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards			R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39)	C130	Bromodichloromethane	6.30	83	91157	8.92	ug/L		96
40)	C161	2-Chloroethylvinyl E	6.50	63	363666	48.08	ug/L		99
41)	C012	Methylcycolhexane	6.02	83	171556	10.15	ug/L		98
42)	C145	cis-1,3-Dichloroprop	6.62	75	111664	9.13	ug/L		95
45)	C230	Toluene	6.87	92	212393	9.80	ug/L		98
46)	C170	trans-1,3-Dichloropr	7.05	75	95524	9.34	ug/L		100
47)	C284	Ethyl Methacrylate	7.07	69	109235	9.88	ug/L	#	85
48)	C160	1,1,2-Trichloroethan	7.20	83	69068	10.09	ug/L		96
49)	C210	4-Methyl-2-pentanone	6.72	43	1028331	51.55	ug/L		100
50)	C220	Tetrachloroethene	7.29	166	84017	10.02	ug/L		95
51)	C221	1,3-Dichloropropane	7.34	76	144198	10.04	ug/L		95
52)	C155	Dibromochloromethane	7.53	129	46408	8.50	ug/L		97
53)	C163	1,2-Dibromoethane	7.62	107	78649	9.96	ug/L		100
54)	C215	2-Hexanone	7.36	43	672145	52.30	ug/L		99
55)	C235	Chlorobenzene	7.98	112	217378	9.93	ug/L		96
56)	C281	1,1,1,2-Tetrachloroe	8.05	131	65291	9.59	ug/L		98
57)	C240	Ethylbenzene	8.04	91	392397	9.88	ug/L		100
58)	C246	m,p-Xylene	8.13	106	302759	19.76	ug/L		98
59)	C247	o-Xylene	8.46	106	148884	9.79	ug/L		98
60)	C245	Styrene	8.48	104	217554	9.50	ug/L		98
63)	C180	Bromoform	8.68	173	23771	8.24	ug/L		89
64)	C966	Isopropylbenzene	8.75	105	367573	9.93	ug/L		100
65)	C301	Bromobenzene	9.04	156	89651	9.92	ug/L		95
66)	C225	1,1,2,2-Tetrachloroe	9.03	83	118315	10.14	ug/L		97
67)	C282	1,2,3-Trichloropropa	9.08	110	39746	10.33	ug/L		100
68)	C283	t-1,4-Dichloro-2-But	9.07	53	97087	45.94	ug/L	#	64
69)	C302	n-Propylbenzene	9.08	91	472696	9.94	ug/L		100
70)	C303	2-Chlorotoluene	9.19	126	89932	10.29	ug/L		100
71)	C289	4-Chlorotoluene	9.27	126	86964	9.91	ug/L		100
72)	C304	1,3,5-Trimethylbenze	9.22	105	328424	9.96	ug/L		99
73)	C306	tert-Butylbenzene	9.50	134	59524	9.81	ug/L		100
74)	C307	1,2,4-Trimethylbenze	9.54	105	333894	9.89	ug/L		97
75)	C308	sec-Butylbenzene	9.68	105	406073	9.84	ug/L		100
76)	C260	1,3-Dichlorobenzene	9.81	146	177509	9.99	ug/L		96
77)	C309	4-Isopropyltoluene	9.79	119	322778	9.85	ug/L		98
78)	C267	1,4-Dichlorobenzene	9.89	146	178027	9.85	ug/L		100
79)	C249	1,2-Dichlorobenzene	10.22	146	172691	9.90	ug/L		98
80)	C310	n-Butylbenzene	10.14	91	330691	9.89	ug/L		99
81)	C286	1,2-Dibromo-3-Chloro	10.89	75	16617	9.20	ug/L	#	79
82)	C313	1,2,4-Trichlorobenze	11.56	180	118386	9.84	ug/L		99
83)	C316	Hexachlorobutadiene	11.67	225	59151	10.05	ug/L		100
84)	C314	Naphthalene	11.78	128	358503	10.06	ug/L		100
85)	C934	1,2,3-Trichlorobenze	11.98	180	113153	9.89	ug/L		99

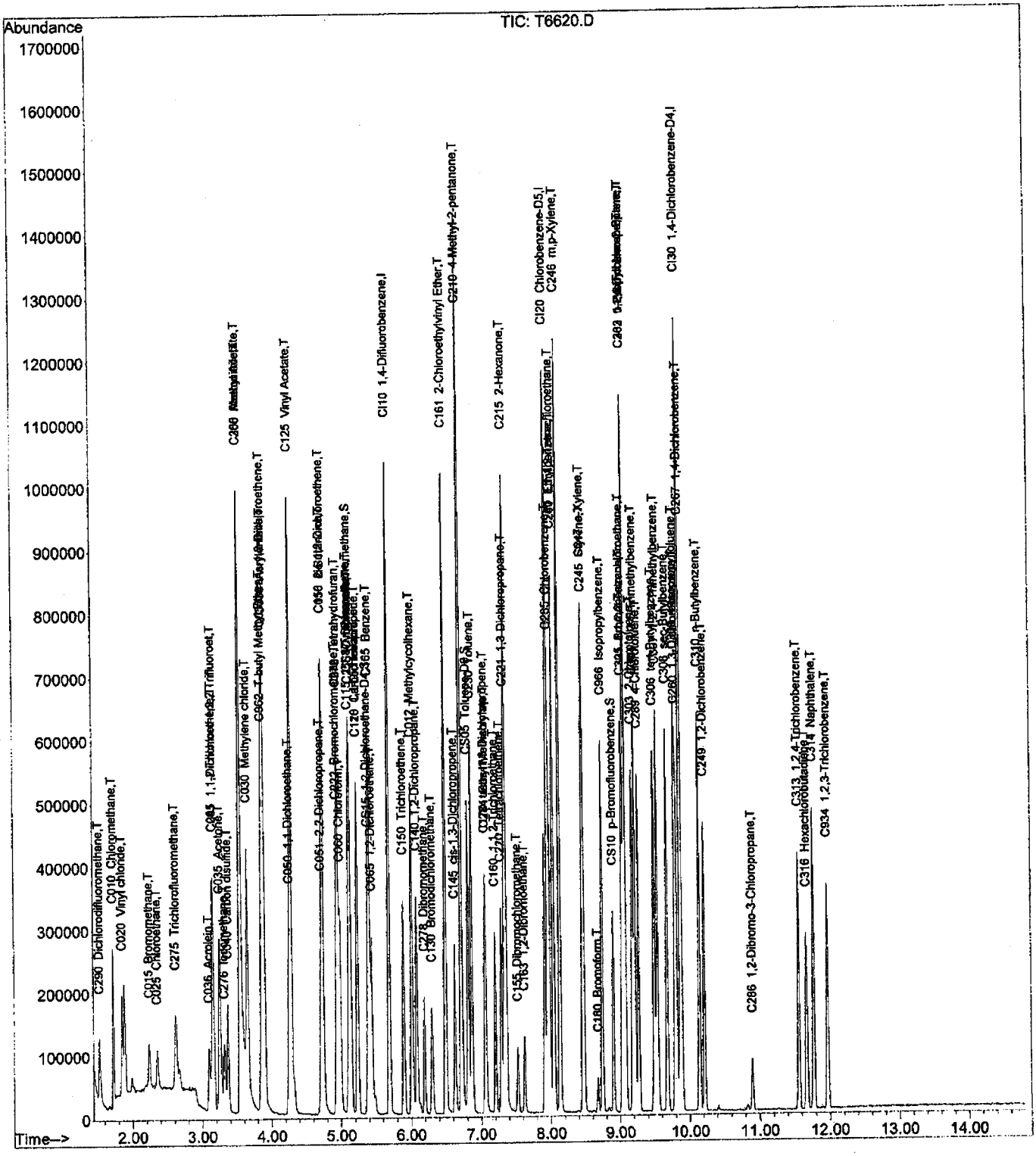
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6620.D
Acq On : 3 Dec 2009 1:29
Sample : RL90211-CAL3
Misc :
MS Integration Params: RTEINT.P

Vial: 22
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 10:45:28 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6621.D
Acq On : 3 Dec 2009 1:53
Sample : RL90211-CAL4
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:40 2009

Vial: 23
Operator: TWS
Inst : 5975 T
Multiplr: 1.00
Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	659473	25.00	ug/L	0.00 100.00%
43) CI20	Chlorobenzene-D5	7.96	117	530916	25.00	ug/L	0.00 100.00%
62) CI30	1,4-Dichlorobenzene-	9.87	152	284658	25.00	ug/L	0.00 100.00%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	238739	26.09	ug/L	0.00
Spiked Amount	25.000	Range 70 - 130		Recovery =	104.36%		
31) CS15	1,2-Dichloroethane-D	5.38	65	366550	24.34	ug/L	0.00
Spiked Amount	25.000	Range 66 - 137		Recovery =	97.36%		
44) CS05	Toluene-D8	6.81	98	826720	25.41	ug/L	0.00
Spiked Amount	25.000	Range 71 - 126		Recovery =	101.64%		
61) CS10	p-Bromofluorobenzene	8.90	174	223766	25.01	ug/L	0.00
Spiked Amount	25.000	Range 73 - 120		Recovery =	100.04%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.52	85	247533	26.74	ug/L	100
3) C010	Chloromethane	1.72	50	478588	25.98	ug/L	100
4) C020	Vinyl chloride	1.85	62	335026	25.83	ug/L	100
5) C015	Bromomethane	2.23	94	112808	25.57	ug/L	100
6) C025	Chloroethane	2.35	64	151568	26.56	ug/L	100
7) C275	Trichlorofluorometha	2.61	101	312651	26.31	ug/L	100
8) C045	1,1-Dichloroethene	3.16	96	195353	25.63	ug/L	100
9) C030	Methylene chloride	3.65	84	287626	24.24	ug/L	100
10) C040	Carbon disulfide	3.36	76	577422	27.24	ug/L	100
11) C036	Acrolein	3.10	56	212683	527.89	ug/L	99
12) C038	Acrylonitrile	3.89	53	1047989	133.71	ug/L	99
13) C035	Acetone	3.25	43	960470	131.91	ug/L	100
14) C300	Acetonitrile	3.54	41	2919553	1037.84	ug/L	99
15) C276	Iodomethane	3.31	142	269382	26.03	ug/L	100
16) C291	1,1,2 Trichloro-1,2,	3.15	101	190133	26.25	ug/L	99
17) C962	T-butyl Methyl Ether	3.86	73	893552	26.36	ug/L	100
18) C057	trans-1,2-Dichloroet	3.88	96	257495	25.72	ug/L	100
19) C255	Methyl Acetate	3.55	43	822255	26.84	ug/L	100
20) C050	1,1-Dichloroethane	4.25	63	566563	26.11	ug/L	100
21) C125	Vinyl Acetate	4.28	43	3726401	143.49	ug/L	100
22) C051	2,2-Dichloropropane	4.71	77	269333	26.09	ug/L	100
23) C056	cis-1,2-Dichloroethe	4.74	96	292567	26.03	ug/L	100
24) C272	Tetrahydrofuran	4.95	42	1011170	127.99	ug/L	100
25) C222	Bromochloromethane	4.94	128	136044	25.87	ug/L	100
26) C060	Chloroform	4.99	83	489582	26.31	ug/L	100
27) C115	1,1,1-Trichloroethan	5.11	97	354260	27.38	ug/L	100
28) C120	Carbon tetrachloride	5.23	117	260563	26.86	ug/L	98
29) C116	1,1-Dichloropropene	5.23	75	360185	25.82	ug/L	100
32) C165	Benzene	5.41	78	1054228	25.88	ug/L	100
33) C065	1,2-Dichloroethane	5.44	62	498507	25.89	ug/L	100
34) C110	2-Butanone	4.74	43	1453090	130.62	ug/L	100
35) C256	Cyclohexane	5.14	56	571293	25.76	ug/L	99
36) C150	Trichloroethene	5.89	95	259199	25.81	ug/L	100
37) C140	1,2-Dichloropropane	6.08	63	295912	26.01	ug/L	100
38) C278	Dibromomethane	6.19	93	169805	26.80	ug/L	100

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6621.D
Acq On : 3 Dec 2009 1:53
Sample : RL90211-CAL4
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:40 2009

Vial: 23
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	273361	27.12	ug/L		100
40) C161	2-Chloroethylvinyl E	6.49	63	1012821	135.80	ug/L		99
41) C012	Methylcycolhexane	6.02	83	435579	26.13	ug/L		98
42) C145	cis-1,3-Dichloroprop	6.62	75	338996	28.12	ug/L		100
45) C230	Toluene	6.87	92	569872	25.51	ug/L		100
46) C170	trans-1,3-Dichloropr	7.05	75	295143	27.99	ug/L		100
47) C284	Ethyl Methacrylate	7.06	69	311727	27.34	ug/L	#	84
48) C160	1,1,2-Trichloroethan	7.20	83	187329	26.54	ug/L		100
49) C210	4-Methyl-2-pentanone	6.72	43	2820966	137.17	ug/L		100
50) C220	Tetrachloroethene	7.29	166	227523	26.31	ug/L		100
51) C221	1,3-Dichloropropane	7.33	76	385432	26.04	ug/L		100
52) C155	Dibromochloromethane	7.53	129	151609	26.93	ug/L		100
53) C163	1,2-Dibromoethane	7.62	107	222934	27.38	ug/L		100
54) C215	2-Hexanone	7.36	43	1816810	137.12	ug/L		100
55) C235	Chlorobenzene	7.98	112	583121	25.83	ug/L		100
56) C281	1,1,1,2-Tetrachloroe	8.05	131	194884	27.76	ug/L		100
57) C240	Ethylbenzene	8.04	91	1064701	25.99	ug/L		100
58) C246	m,p-Xylene	8.13	106	822472	52.07	ug/L		100
59) C247	o-Xylene	8.46	106	414590	26.44	ug/L		100
60) C245	Styrene	8.48	104	627762	26.58	ug/L		100
63) C180	Bromoform	8.67	173	81885	27.10	ug/L		100
64) C966	Isopropylbenzene	8.75	105	1019584	26.31	ug/L		100
65) C301	Bromobenzene	9.05	156	249881	26.40	ug/L		100
66) C225	1,1,2,2-Tetrachloroe	9.03	83	333055	27.26	ug/L		100
67) C282	1,2,3-Trichloropropa	9.08	110	106855	26.52	ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.07	53	326722	147.66	ug/L	#	80
69) C302	n-Propylbenzene	9.08	91	1327113	26.65	ug/L		100
70) C303	2-Chlorotoluene	9.19	126	242969	26.54	ug/L		100
71) C289	4-Chlorotoluene	9.27	126	244282	26.59	ug/L		100
72) C304	1,3,5-Trimethylbenze	9.22	105	922428	26.73	ug/L		100
73) C306	tert-Butylbenzene	9.50	134	172245	27.11	ug/L		100
74) C307	1,2,4-Trimethylbenze	9.54	105	945660	26.76	ug/L		100
75) C308	sec-Butylbenzene	9.68	105	1158819	26.83	ug/L		100
76) C260	1,3-Dichlorobenzene	9.81	146	482913	25.95	ug/L		100
77) C309	4-Isopropyltoluene	9.80	119	917096	26.73	ug/L		100
78) C267	1,4-Dichlorobenzene	9.89	146	488602	25.82	ug/L		100
79) C249	1,2-Dichlorobenzene	10.22	146	478665	26.21	ug/L		100
80) C310	n-Butylbenzene	10.14	91	919007	26.24	ug/L		100
81) C286	1,2-Dibromo-3-Chloro	10.90	75	51096	27.03	ug/L		100
82) C313	1,2,4-Trichlorobenze	11.56	180	328127	26.05	ug/L		100
83) C316	Hexachlorobutadiene	11.67	225	161976	26.27	ug/L		100
84) C314	Naphthalene	11.77	128	999542	26.80	ug/L		100
85) C934	1,2,3-Trichlorobenze	11.97	180	313740	26.18	ug/L		100

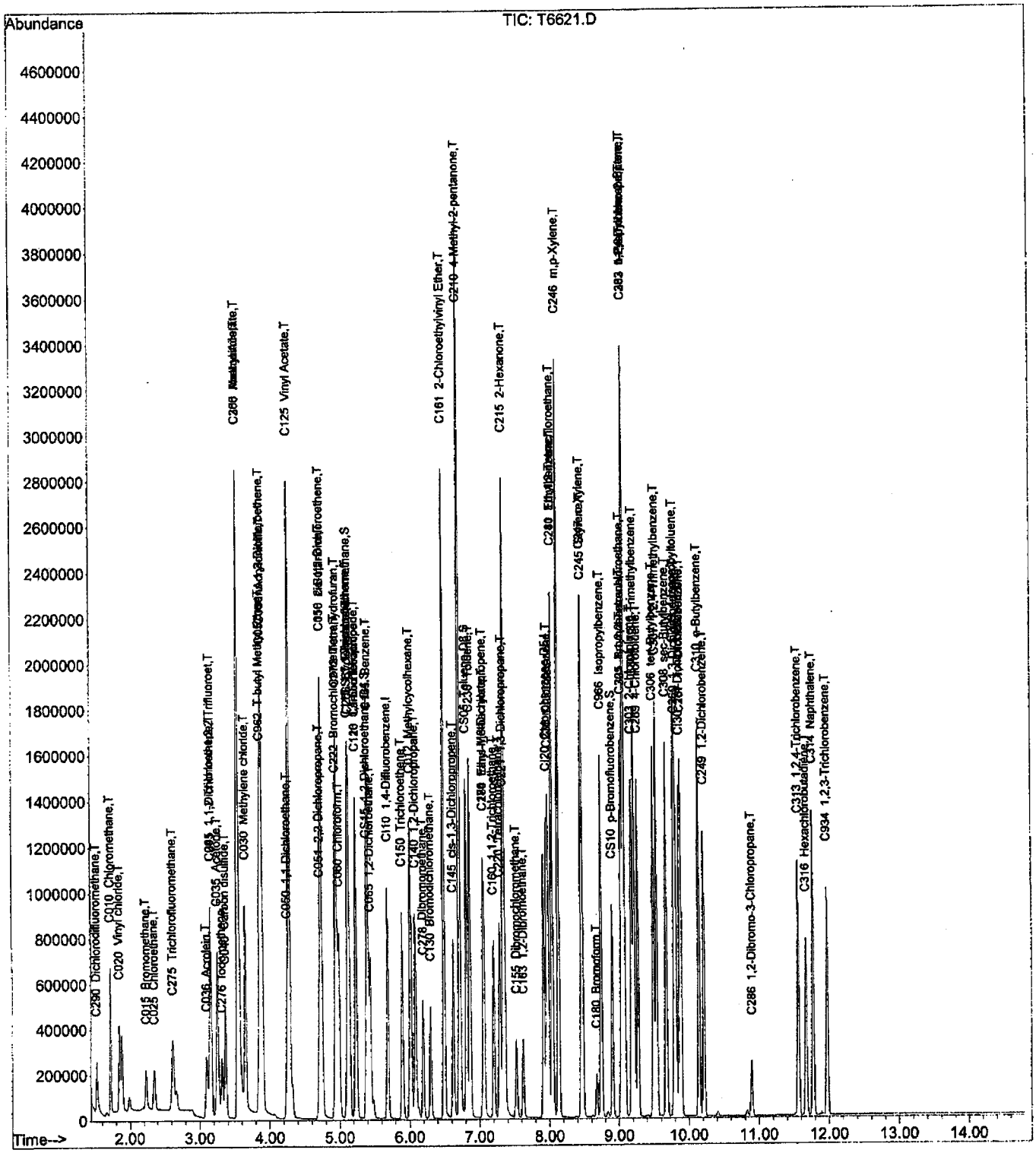
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6621.D
Acq On : 3 Dec 2009 1:53
Sample : RL90211-CAL4
Misc :
MS Integration Params: RTEINT.P

Vial: 23
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 10:45:40 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6622.D
Acq On : 3 Dec 2009 2:17
Sample : RL90211-CAL5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:56 2009

Vial: 24
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	746207	25.00	ug/L	0.00 113.15%
43) CI20	Chlorobenzene-D5	7.97	117	614735	25.00	ug/L	0.00 115.79%
62) CI30	1,4-Dichlorobenzene-	9.87	152	334129	25.00	ug/L	0.00 117.38%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.13	111	523037	50.52	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	202.08%#	
31) CS15	1,2-Dichloroethane-D	5.39	65	819497	48.09	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery	=	192.36%#	
44) CS05	Toluene-D8	6.82	98	1858626	49.34	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery	=	197.36%#	
61) CS10	p-Bromofluorobenzene	8.91	174	512653	49.48	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery	=	197.92%#	
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.53	85	434393	41.48	ug/L	99
3) C010	Chloromethane	1.72	50	929605	44.60	ug/L	99
4) C020	Vinyl chloride	1.85	62	619355	42.19	ug/L	99
5) C015	Bromomethane	2.24	94	223604	44.79	ug/L	96
6) C025	Chloroethane	2.35	64	293138	45.40	ug/L	100
7) C275	Trichlorofluorometha	2.62	101	587828	43.72	ug/L	99
8) C045	1,1-Dichloroethene	3.16	96	375252	43.51	ug/L	99
9) C030	Methylene chloride	3.66	84	575873	42.89	ug/L	99
10) C040	Carbon disulfide	3.37	76	1210785	50.48	ug/L	99
11) C036	Acrolein	3.10	56	443226	972.24	ug/L	99
12) C038	Acrylonitrile	3.90	53	2191893	247.15	ug/L	98
13) C035	Acetone	3.25	43	1875801	227.67	ug/L	97
14) C300	Acetonitrile	3.55	41	5341126	1677.97	ug/L	97
15) C276	Iodomethane	3.32	142	530538	45.31	ug/L	100
16) C291	1,1,2 Trichloro-1,2,	3.15	101	338246	41.28	ug/L	99
17) C962	T-butyl Methyl Ether	3.86	73	1840286	47.99	ug/L	99
18) C057	trans-1,2-Dichloroet	3.88	96	528374	46.65	ug/L	98
19) C255	Methyl Acetate	3.55	43	1691105	48.79	ug/L	100
20) C050	1,1-Dichloroethane	4.25	63	1153455	46.97	ug/L	98
21) C125	Vinyl Acetate	4.28	43	8432071	286.96	ug/L	100
22) C051	2,2-Dichloropropane	4.72	77	549632	47.05	ug/L	97
23) C056	cis-1,2-Dichloroethe	4.73	96	606006	47.64	ug/L	98
24) C272	Tetrahydrofuran	4.95	42	2121154	237.29	ug/L	100
25) C222	Bromochloromethane	4.94	128	290358	48.79	ug/L	96
26) C060	Chloroform	4.99	83	1012895	48.11	ug/L	99
27) C115	1,1,1-Trichloroethan	5.11	97	727106	49.67	ug/L	99
28) C120	Carbon tetrachloride	5.23	117	556495	50.70	ug/L	97
29) C116	1,1-Dichloropropene	5.24	75	729115	46.18	ug/L	98
32) C165	Benzene	5.41	78	2192414	47.57	ug/L	100
33) C065	1,2-Dichloroethane	5.44	62	1057398	48.53	ug/L	98
34) C110	2-Butanone	4.75	43	3088686	245.38	ug/L	99
35) C256	Cyclohexane	5.14	56	1073031	42.76	ug/L	100
36) C150	Trichloroethene	5.90	95	531110	46.74	ug/L	99
37) C140	1,2-Dichloropropane	6.08	63	636172	49.41	ug/L	99
38) C278	Dibromomethane	6.19	93	367930	51.31	ug/L	97

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6622.D
Acq On : 3 Dec 2009 2:17
Sample : RL90211-CAL5
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:45:56 2009

Vial: 24
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	644577	56.53 ug/L	97
40) C161	2-Chloroethylvinyl E	6.50	63	2264184	268.29 ug/L	99
41) C012	Methylcycolhexane	6.02	83	821651	43.56 ug/L	99
42) C145	cis-1,3-Dichloroprop	6.62	75	781565	57.29 ug/L	100
45) C230	Toluene	6.87	92	1233685	47.69 ug/L	100
46) C170	trans-1,3-Dichloropr	7.05	75	704916	57.74 ug/L	99
47) C284	Ethyl Methacrylate	7.07	69	709371	53.74 ug/L #	82
48) C160	1,1,2-Trichloroethan	7.21	83	414980	50.78 ug/L	97
49) C210	4-Methyl-2-pentanone	6.72	43	6083821	255.49 ug/L	99
50) C220	Tetrachloroethene	7.30	166	467286	46.67 ug/L	97
51) C221	1,3-Dichloropropane	7.34	76	852290	49.73 ug/L	98
52) C155	Dibromochloromethane	7.53	129	390541	59.91 ug/L	96
53) C163	1,2-Dibromoethane	7.62	107	495508	52.56 ug/L	96
54) C215	2-Hexanone	7.36	43	3897779	254.06 ug/L	100
55) C235	Chlorobenzene	7.98	112	1264940	48.38 ug/L	98
56) C281	1,1,1,2-Tetrachloroe	8.05	131	443342	54.55 ug/L	97
57) C240	Ethylbenzene	8.05	91	2279824	48.07 ug/L	99
58) C246	m,p-Xylene	8.13	106	1793397	98.07 ug/L	99
59) C247	o-Xylene	8.46	106	897312	49.42 ug/L	93
60) C245	Styrene	8.48	104	1418693	51.87 ug/L	97
63) C180	Bromoform	8.68	173	218247	61.53 ug/L	99
64) C966	Isopropylbenzene	8.75	105	2213268	48.66 ug/L	99
65) C301	Bromobenzene	9.04	156	549186	49.44 ug/L	98
66) C225	1,1,2,2-Tetrachloroe	9.03	83	748231	52.17 ug/L	100
67) C282	1,2,3-Trichloropropa	9.08	110	231708	48.99 ug/L	100
68) C283	t-1,4-Dichloro-2-But	9.07	53	806962	310.71 ug/L	87
69) C302	n-Propylbenzene	9.08	91	2874206	49.17 ug/L	98
70) C303	2-Chlorotoluene	9.19	126	527957	49.14 ug/L	100
71) C289	4-Chlorotoluene	9.28	126	528455	49.01 ug/L	100
72) C304	1,3,5-Trimethylbenze	9.22	105	2005654	49.51 ug/L	99
73) C306	tert-Butylbenzene	9.50	134	382068	51.23 ug/L	100
74) C307	1,2,4-Trimethylbenze	9.54	105	2073683	49.99 ug/L	97
75) C308	sec-Butylbenzene	9.68	105	2502529	49.36 ug/L	100
76) C260	1,3-Dichlorobenzene	9.81	146	1066870	48.85 ug/L	98
77) C309	4-Isopropyltoluene	9.79	119	2005905	49.81 ug/L	99
78) C267	1,4-Dichlorobenzene	9.89	146	1067945	48.09 ug/L	98
79) C249	1,2-Dichlorobenzene	10.22	146	1053654	49.16 ug/L	97
80) C310	n-Butylbenzene	10.14	91	1990813	48.43 ug/L	99
81) C286	1,2-Dibromo-3-Chloro	10.90	75	127328	57.39 ug/L	96
82) C313	1,2,4-Trichlorobenze	11.56	180	720109	48.71 ug/L	97
83) C316	Hexachlorobutadiene	11.67	225	340061	46.99 ug/L	99
84) C314	Naphthalene	11.78	128	2254092	51.49 ug/L	100
85) C934	1,2,3-Trichlorobenze	11.98	180	693681	49.32 ug/L	100

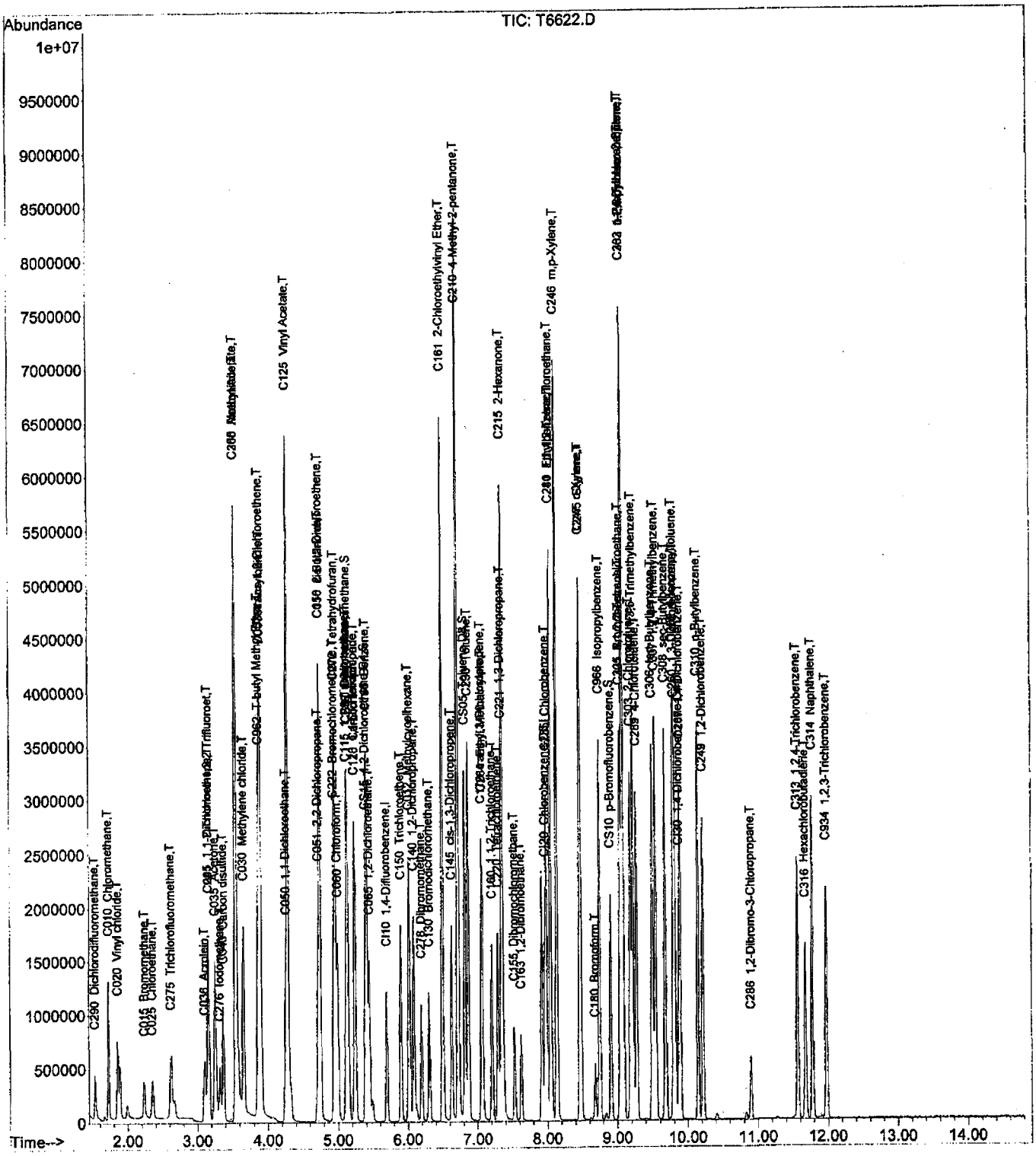
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6622.D
Acq On : 3 Dec 2009 2:17
Sample : RL90211-CAL5
Misc :
MS Integration Params: RTEINT.P

Vial: 24
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 10:45:56 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6623.D
Acq On : 3 Dec 2009 2:41
Sample : RL90211-CAL6
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:46:08 2009

Vial: 25
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	802465	25.00	ug/L	0.00 121.68%
43) CI20	Chlorobenzene-D5	7.96	117	684935	25.00	ug/L	0.00 129.01%
62) CI30	1,4-Dichlorobenzene-	9.87	152	371308	25.00	ug/L	0.00 130.44%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	1290744	115.93	ug/L	0.00
Spiked Amount	25.000	Range 70 - 130		Recovery =	463.72%#		
31) CS15	1,2-Dichloroethane-D	5.38	65	1959333	106.91	ug/L	0.00
Spiked Amount	25.000	Range 66 - 137		Recovery =	427.64%#		
44) CS05	Toluene-D8	6.81	98	4816293	114.74	ug/L	0.00
Spiked Amount	25.000	Range 71 - 126		Recovery =	458.96%#		
61) CS10	p-Bromofluorobenzene	8.91	174	1294421	112.12	ug/L	0.00
Spiked Amount	25.000	Range 73 - 120		Recovery =	448.48%#		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.52	85	1119408	99.39	ug/L	98
3) C010	Chloromethane	1.72	50	2051843	91.54	ug/L	99
4) C020	Vinyl chloride	1.85	62	1420548	89.99	ug/L	99
5) C015	Bromomethane	2.24	94	485315	90.40	ug/L	99
6) C025	Chloroethane	2.35	64	591632	85.20	ug/L	99
7) C275	Trichlorofluorometha	2.62	101	1441989	99.74	ug/L	99
8) C045	1,1-Dichloroethene	3.16	96	978310	105.48	ug/L	100
9) C030	Methylene chloride	3.65	84	1385578	95.97	ug/L	97
10) C040	Carbon disulfide	3.36	76	3451133	133.80	ug/L	98
11) C036	Acrolein	3.10	56	1030194	2101.37	ug/L	100
12) C038	Acrylonitrile	3.89	53	5303776	556.11	ug/L	98
13) C035	Acetone	3.25	43	4441388	501.27	ug/L	98
14) C300	Acetonitrile	3.54	41	14848215	4337.70	ug/L	99
15) C276	Iodomethane	3.31	142	1314612	104.39	ug/L	100
16) C291	1,1,2 Trichloro-1,2,	3.15	101	947484	107.52	ug/L	99
17) C962	T-butyl Methyl Ether	3.86	73	4441577	107.70	ug/L	100
18) C057	trans-1,2-Dichloroet	3.88	96	1340013	110.01	ug/L	99
19) C255	Methyl Acetate	3.55	43	4028413	108.08	ug/L	100
20) C050	1,1-Dichloroethane	4.25	63	2823855	106.94	ug/L	98
21) C125	Vinyl Acetate	4.27	43	17786878	562.88	ug/L	97
22) C051	2,2-Dichloropropane	4.72	77	1387069	110.41	ug/L	96
23) C056	cis-1,2-Dichloroethe	4.74	96	1480839	108.26	ug/L	99
24) C272	Tetrahydrofuran	4.95	42	5120958	532.71	ug/L	99
25) C222	Bromochloromethane	4.94	128	692550	108.21	ug/L	97
26) C060	Chloroform	4.99	83	2474505	109.28	ug/L	98
27) C115	1,1,1-Trichloroethan	5.11	97	1923740	122.19	ug/L	99
28) C120	Carbon tetrachloride	5.23	117	1575954	133.52	ug/L	98
29) C116	1,1-Dichloropropene	5.23	75	1940776	114.31	ug/L	99
32) C165	Benzene	5.41	78	5498736	110.93	ug/L	99
33) C065	1,2-Dichloroethane	5.44	62	2500858	106.73	ug/L	99
34) C110	2-Butanone	4.74	43	7572130	559.40	ug/L	99
35) C256	Cyclohexane	5.14	56	3100499	114.91	ug/L	99
36) C150	Trichloroethene	5.89	95	1333458	109.12	ug/L	100
37) C140	1,2-Dichloropropane	6.08	63	1562533	112.86	ug/L	99
38) C278	Dibromomethane	6.19	93	881916	114.38	ug/L	98

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6623.D
Acq On : 3 Dec 2009 2:41
Sample : RL90211-CAL6
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 10:46:08 2009

Vial: 25
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	1678187	136.85	ug/L		98
40) C161	2-Chloroethylvinyl E	6.50	63	5903946	650.54	ug/L		98
41) C012	Methylcycolhexane	6.02	83	2382108	117.42	ug/L		98
42) C145	cis-1,3-Dichloroprop	6.62	75	2032573	138.55	ug/L		99
45) C230	Toluene	6.87	92	3226452	111.95	ug/L		97
46) C170	trans-1,3-Dichloropr	7.05	75	1891405	139.04	ug/L		99
47) C284	Ethyl Methacrylate	7.07	69	1802971	122.58	ug/L	#	81
48) C160	1,1,2-Trichloroethan	7.20	83	1025878	112.67	ug/L		96
49) C210	4-Methyl-2-pentanone	6.72	43	14872297	560.54	ug/L		96
50) C220	Tetrachloroethene	7.30	166	1248051	111.86	ug/L		99
51) C221	1,3-Dichloropropane	7.34	76	2124996	111.29	ug/L		96
52) C155	Dibromochloromethane	7.53	129	1075622	148.08	ug/L		98
53) C163	1,2-Dibromoethane	7.62	107	1230297	117.13	ug/L		97
54) C215	2-Hexanone	7.36	43	9613453	562.40	ug/L		99
55) C235	Chlorobenzene	7.98	112	3207070	110.10	ug/L		99
56) C281	1,1,1,2-Tetrachloroe	8.05	131	1158509	127.94	ug/L		98
57) C240	Ethylbenzene	8.04	91	5919663	112.03	ug/L		100
58) C246	m,p-Xylene	8.13	106	4669814	229.18	ug/L		99
59) C247	o-Xylene	8.46	106	2270058	112.21	ug/L		94
60) C245	Styrene	8.48	104	3682546	120.84	ug/L		98
63) C180	Bromoform	8.68	173	654580	166.07	ug/L		97
64) C966	Isopropylbenzene	8.75	105	5741254	113.58	ug/L		99
65) C301	Bromobenzene	9.05	156	1360174	110.18	ug/L		97
66) C225	1,1,2,2-Tetrachloroe	9.03	83	1834763	115.11	ug/L		100
67) C282	1,2,3-Trichloropropa	9.08	110	565600	107.62	ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.07	53	2172062	752.59	ug/L		89
69) C302	n-Propylbenzene	9.08	91	7479384	115.14	ug/L		99
70) C303	2-Chlorotoluene	9.19	126	1302649	109.10	ug/L		100
71) C289	4-Chlorotoluene	9.28	126	1316738	109.89	ug/L		100
72) C304	1,3,5-Trimethylbenze	9.22	105	5104423	113.39	ug/L		100
73) C306	tert-Butylbenzene	9.50	134	985915	118.96	ug/L		100
74) C307	1,2,4-Trimethylbenze	9.54	105	5240510	113.69	ug/L		99
75) C308	sec-Butylbenzene	9.68	105	6673878	118.45	ug/L		98
76) C260	1,3-Dichlorobenzene	9.81	146	2647763	109.10	ug/L		97
77) C309	4-Isopropyltoluene	9.80	119	5308774	118.64	ug/L		99
78) C267	1,4-Dichlorobenzene	9.89	146	2619449	106.14	ug/L		98
79) C249	1,2-Dichlorobenzene	10.22	146	2573883	108.06	ug/L		98
80) C310	n-Butylbenzene	10.14	91	5207613	114.00	ug/L		98
81) C286	1,2-Dibromo-3-Chloro	10.90	75	348718	141.44	ug/L		98
82) C313	1,2,4-Trichlorobenze	11.56	180	1704780	103.76	ug/L		97
83) C316	Hexachlorobutadiene	11.67	225	877228	109.09	ug/L		98
84) C314	Naphthalene	11.78	128	5402231	111.04	ug/L		100
85) C934	1,2,3-Trichlorobenze	11.98	180	1634363	104.57	ug/L		97

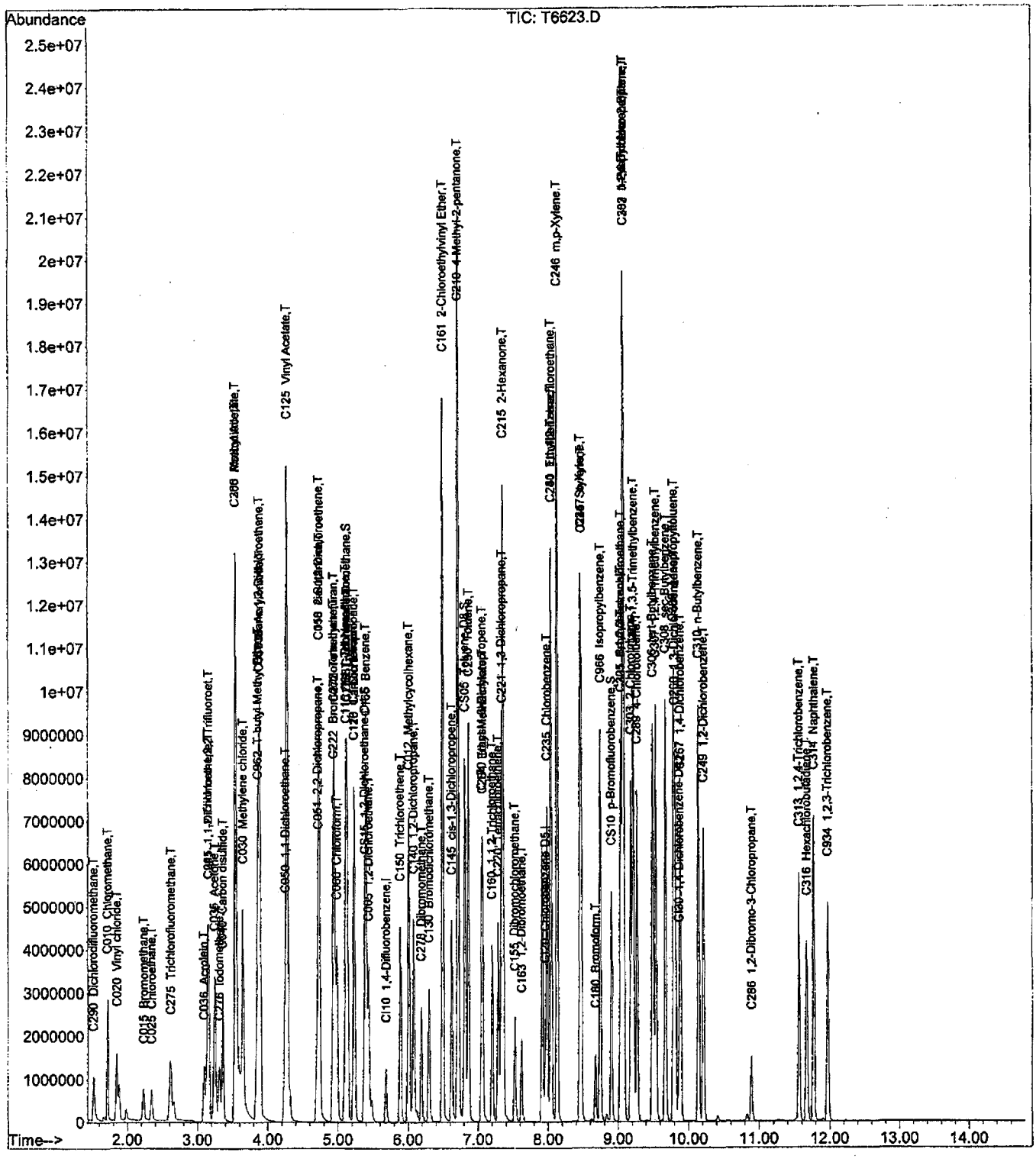
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6623.D
Acq On : 3 Dec 2009 2:41
Sample : RL90211-CAL6
Misc :
MS Integration Params: RTEINT.P

Vial: 25
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 10:46:08 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 10:49:44 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6633.D
Acq On : 3 Dec 2009 6:41
Sample : RL90211-SCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 12:18:30 2009

Vial: 35
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 11:00:52 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	679888	25.00	ug/L	0.00 103.10%
43) CI20	Chlorobenzene-D5	7.96	117	544011	25.00	ug/L	0.00 102.47%
62) CI30	1,4-Dichlorobenzene-	9.87	152	291328	25.00	ug/L	0.00 102.34%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	237294	25.16	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	100.64%		
31) CS15	1,2-Dichloroethane-D	5.38	65	373364	24.05	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	96.20%		
44) CS05	Toluene-D8	6.81	98	831524	24.94	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	99.76%		
61) CS10	p-Bromofluorobenzene	8.90	174	224404	24.47	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	97.88%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.52	85	190051	19.92	ug/L	99
3) C010	Chloromethane	1.72	50	400197	21.07	ug/L	99
4) C020	Vinyl chloride	1.85	62	288288	21.56	ug/L	100
5) C015	Bromomethane	2.23	94	100494	22.09	ug/L	98
6) C025	Chloroethane	2.35	64	137059	26.68	ug/L	99
7) C275	Trichlorofluorometha	2.61	101	290842	23.74	ug/L	100
8) C045	1,1-Dichloroethene	3.16	96	227022	28.89	ug/L	99
9) C030	Methylene chloride	3.65	84	299186	24.46	ug/L	99
10) C040	Carbon disulfide	3.36	76	578162	27.73	ug/L	99
11) C036	Acrolein	3.09	56	222219	535.00	ug/L	98
12) C038	Acrylonitrile	3.89	53	1053453	130.37	ug/L	99
13) C035	Acetone	3.25	43	933953	124.41	ug/L	100
14) C300	Acetonitrile	3.54	41	2658153	916.55	ug/L	99
15) C276	Iodomethane	3.31	142	272891	25.58	ug/L	100
16) C291	1,1,2 Trichloro-1,2,	3.15	101	191955	25.71	ug/L	99
17) C962	T-butyl Methyl Ether	3.86	73	895667	25.63	ug/L	100
18) C057	trans-1,2-Dichloroet	3.88	96	270773	26.24	ug/L	98
19) C255	Methyl Acetate	3.55	43	828380	26.23	ug/L	100
20) C050	1,1-Dichloroethane	4.25	63	587635	26.27	ug/L	99
21) C125	Vinyl Acetate	4.28	43	3776331	124.88	ug/L	100
22) C051	2,2-Dichloropropane	4.71	77	248268	23.33	ug/L	99
23) C056	cis-1,2-Dichloroethe	4.73	96	297571	25.68	ug/L	98
24) C272	Tetrahydrofuran	4.95	42	1021154	125.38	ug/L	99
25) C222	Bromochloromethane	4.94	128	140783	25.96	ug/L	98
26) C060	Chloroform	4.99	83	514537	26.82	ug/L	99
27) C115	1,1,1-Trichloroethan	5.11	97	377085	24.15	ug/L	99
28) C120	Carbon tetrachloride	5.23	117	291991	30.21	ug/L	96
29) C116	1,1-Dichloropropene	5.23	75	391474	27.22	ug/L	99
32) C165	Benzene	5.41	78	1120612	26.68	ug/L	99
33) C065	1,2-Dichloroethane	5.44	62	524409	26.41	ug/L	98
34) C110	2-Butanone	4.74	43	1473084	128.50	ug/L	99
35) C256	Cyclohexane	5.13	56	602921	26.37	ug/L	100
36) C150	Trichloroethene	5.89	95	278888	26.94	ug/L	100
37) C140	1,2-Dichloropropane	6.08	63	314203	26.79	ug/L	99
38) C278	Dibromomethane	6.19	93	177778	27.21	ug/L	97

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6633.D Vial: 35
Acq On : 3 Dec 2009 6:41 Operator: TWS
Sample : RL90211-SCV1 Inst : 5975 T
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 03 12:18:30 2009 Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 11:00:52 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120209\T6621.D (3 Dec 2009 1:53)

Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	288618	21.28 ug/L		96
40) C161	2-Chloroethylvinyl E	6.49	63	1035331	108.20 ug/L		99
41) C012	Methylcycolhexane	6.01	83	458608	26.68 ug/L		98
42) C145	cis-1,3-Dichloroprop	6.62	75	354483	21.55 ug/L		98
45) C230	Toluene	6.86	92	605057	26.43 ug/L		99
46) C170	trans-1,3-Dichloropr	7.05	75	310841	21.66 ug/L		96
47) C284	Ethyl Methacrylate	7.06	69	322785	23.25 ug/L	#	82
48) C160	1,1,2-Trichloroethan	7.20	83	199976	27.65 ug/L		95
49) C210	4-Methyl-2-pentanone	6.72	43	2855056	135.48 ug/L		99
50) C220	Tetrachloroethene	7.29	166	244199	27.56 ug/L		98
51) C221	1,3-Dichloropropane	7.33	76	403531	26.61 ug/L		98
52) C155	Dibromochloromethane	7.53	129	163350	26.68 ug/L		100
53) C163	1,2-Dibromoethane	7.62	107	234090	28.06 ug/L		98
54) C215	2-Hexanone	7.36	43	1841656	135.65 ug/L		100
55) C235	Chlorobenzene	7.98	112	613099	26.50 ug/L		99
56) C281	1,1,1,2-Tetrachloroe	8.05	131	206651	23.31 ug/L		97
57) C240	Ethylbenzene	8.04	91	1124598	26.80 ug/L		99
58) C246	m,p-Xylene	8.13	106	864145	53.40 ug/L		96
59) C247	o-Xylene	8.46	106	431954	26.88 ug/L		94
60) C245	Styrene	8.47	104	680485	28.11 ug/L		92
63) C180	Bromoform	8.68	173	90712	27.81 ug/L		99
64) C966	Isopropylbenzene	8.75	105	1134449	28.60 ug/L		99
65) C301	Bromobenzene	9.04	156	257435	26.58 ug/L		98
66) C225	1,1,2,2-Tetrachloroe	9.03	83	364608	29.15 ug/L		100
67) C282	1,2,3-Trichloropropa	9.08	110	99623	24.16 ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.07	53	334247	102.92 ug/L	#	83
69) C302	n-Propylbenzene	9.08	91	1369141	26.86 ug/L		100
70) C303	2-Chlorotoluene	9.19	126	253827	27.09 ug/L		100
71) C289	4-Chlorotoluene	9.27	126	246718	26.24 ug/L		100
72) C304	1,3,5-Trimethylbenze	9.22	105	959017	27.15 ug/L		100
73) C306	tert-Butylbenzene	9.50	134	179646	27.63 ug/L		100
74) C307	1,2,4-Trimethylbenze	9.54	105	974980	26.96 ug/L		100
75) C308	sec-Butylbenzene	9.68	105	1210108	27.37 ug/L		100
76) C260	1,3-Dichlorobenzene	9.81	146	493447	25.91 ug/L		95
77) C309	4-Isopropyltoluene	9.79	119	931107	26.52 ug/L		99
78) C267	1,4-Dichlorobenzene	9.89	146	506893	26.18 ug/L		98
79) C249	1,2-Dichlorobenzene	10.22	146	491103	26.28 ug/L		99
80) C310	n-Butylbenzene	10.14	91	941922	26.28 ug/L		100
81) C286	1,2-Dibromo-3-Chloro	10.89	75	52350	20.15 ug/L		96
82) C313	1,2,4-Trichlorobenze	11.56	180	334138	25.92 ug/L		95
83) C316	Hexachlorobutadiene	11.67	225	168860	26.76 ug/L		97
84) C314	Naphthalene	11.77	128	1015375	26.60 ug/L		100
85) C934	1,2,3-Trichlorobenze	11.97	180	312543	25.49 ug/L		95

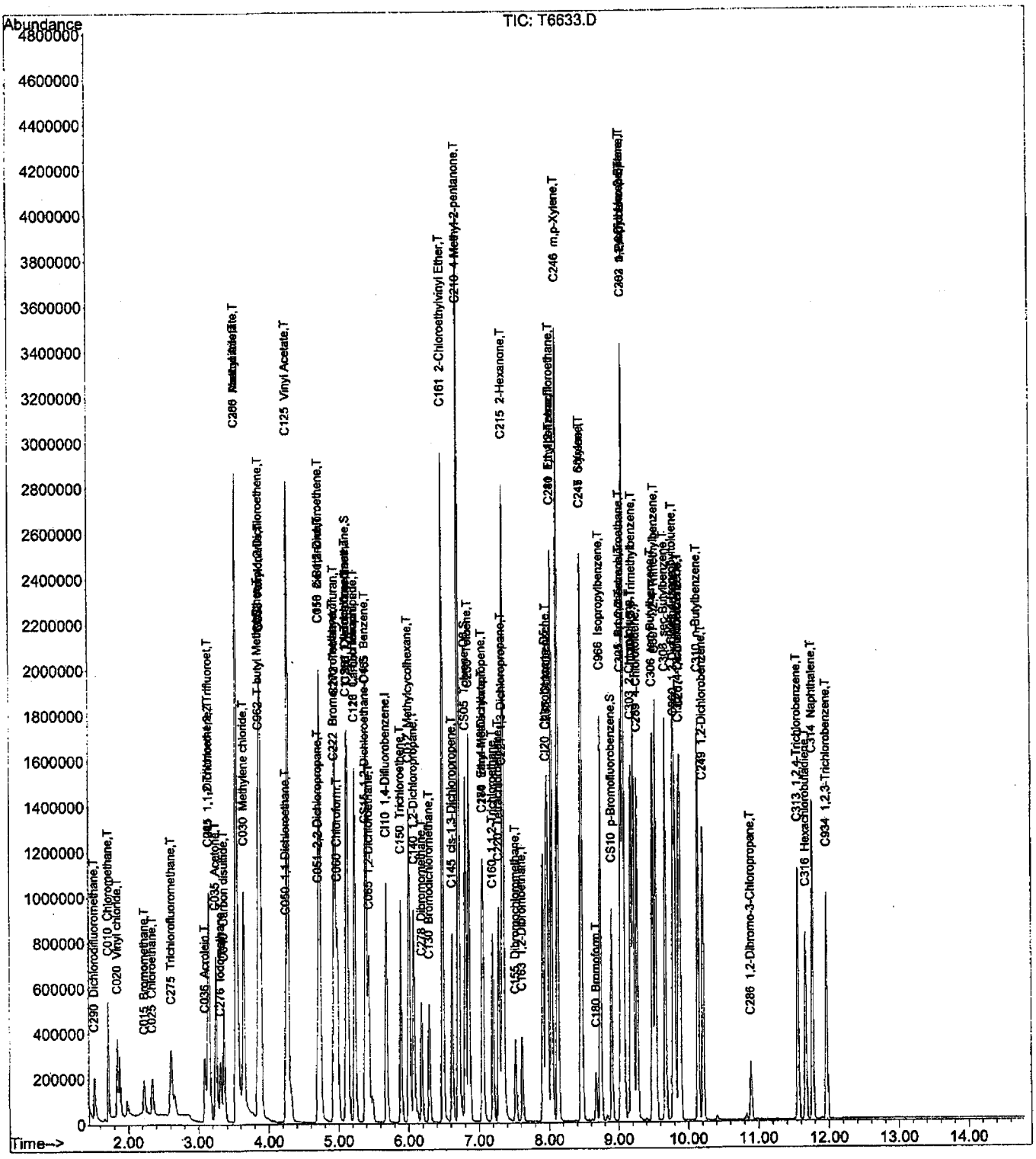
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120209\T6633.D
Acq On : 3 Dec 2009 6:41
Sample : RL90211-SCV1
Misc :
MS Integration Params: RTEINT.P

Vial: 35
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 12:18:30 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 11:00:52 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Instrument ID:	HP5975T	Calibration:	R9L0204
Lab File ID:	T6635.D	Calibration Date:	12/02/09 10:49
Sequence:	RL90313	Injection Date:	12/03/09
Lab Sample ID:	RL90313-CCV1	Injection Time:	12:41

		CONC. (ug/kg)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1-Trichloroethane	L0	25.0	22.5	0.4904809	0.5164708		-10.0	
1,1,2,2-Tetrachloroethane	A	25.0	26.9	1.07318	1.153193	0.3	7.5	
1,1,2-Trichloro-1,2,2-trifluoroethane	A	25.0	28.0	0.2745312	0.3080369		12.2	
1,1,2-Trichloroethane	A	25.0	26.4	0.3323251	0.3507191		5.5	
1,1-Dichloroethane	A	25.0	25.2	0.8226718	0.8303481	0.1	0.9	
1,1-Dichloroethene	A	25.0	26.1	0.2889579	0.3018531		4.5	
1,2,4-Trichlorobenzene	A	25.0	26.0	1.106243	1.149349		3.9	
1,2-Dibromo-3-chloropropane	L0	25.0	19.6	0.1660032	0.1749563		-21.6	
1,2-Dibromoethane	A	25.0	27.4	0.3833728	0.4203955		9.7	
1,2-Dichlorobenzene	A	25.0	26.1	1.603712	1.671903		4.3	
1,2-Dichloroethane	A	25.0	25.0	0.7300143	0.7284925		-0.2	
1,2-Dichloroethane-d4	A	25.0	23.2	0.5709409	0.5297176		-7.2	
1,2-Dichloroethene, Total	A	50.0	50.9	0.4028139	0.4096974		1.7	
1,2-Dichloropropane	A	25.0	25.1	0.4313301	0.4338234		0.6	
1,3-Dichlorobenzene	A	25.0	25.7	1.6341	1.680794		2.9	
1,4-Dichlorobenzene	A	25.0	25.2	1.661659	1.673365		0.7	
2-Butanone	A	125	138	0.4215308	0.464851		10.3	
2-Hexanone	A	125	142	0.6239175	0.7106216		13.9	
4-Bromofluorobenzene	A	25.0	24.6	0.4213772	0.4142611		-1.7	
4-Methyl-2-pentanone	A	125	138	0.968413	1.065875		10.1	
Acetone	A	125	146	0.2760356	0.321731		16.6	
Benzene	A	25.0	25.4	1.54424	1.56664		1.5	
Bromodichloromethane	L0	25.0	20.1	0.3820438	0.4012004		-19.6	
Bromoform	Q	25.0	25.7	0.2653841	0.2834182	0.1	3.0	
Bromomethane	A	25.0	14.8	0.1672553	9.905459E-02		-40.8	
Carbon disulfide	Q	25.0	28.7	0.8035921	0.8855114		14.9	
Carbon Tetrachloride	Q	25.0	28.1	0.3677087	0.3946425		12.4	
Chlorobenzene	A	25.0	25.6	1.063216	1.087255	0.3	2.3	
Chloroethane	L0	25.0	26.7	0.2163292	0.202002		7.0	

Form 7

CONTINUING CALIBRATION CHECK

8260B

Laboratory:	TestAmerica Buffalo	SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY	Project:	Arcadis, Geraghty & Miller - NY9A8463
Instrument ID:	HP5975T	Calibration:	R9L0204
Lab File ID:	T6635.D	Calibration Date:	12/02/09 10:49
Sequence:	RL90313	Injection Date:	12/03/09
Lab Sample ID:	RL90313-CCV1	Injection Time:	12:41

		CONC. (ug/kg)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Chloroform	A	25.0	25.6	0.7054278	0.7228855		2.5	
Chloromethane	A	25.0	24.4	0.6982734	0.6817236	0.1	-2.4	
cis-1,2-Dichloroethene	A	25.0	25.3	0.4261509	0.4309187		1.1	
cis-1,3-Dichloropropene	L0	25.0	21.0	0.4570462	0.5092818		-15.8	
Cyclohexane	A	25.0	27.5	0.8406302	0.9233622		9.8	
Dibromochloromethane	Q	25.0	24.6	0.2651219	0.2735122		-1.7	
Dichlorodifluoromethane	A	25.0	27.4	0.3508672	0.3838188		9.4	
Ethylbenzene	A	25.0	25.5	1.928649	1.969601		2.1	
Isopropylbenzene	A	25.0	26.4	3.403453	3.595624		5.6	
Methyl Acetate	A	25.0	26.9	1.161232	1.248416		7.5	
Methylcyclohexane	A	25.0	28.3	0.6320005	0.7143379		13.0	
Methylene Chloride	A	25.0	23.5	0.4498049	0.4225662		-6.1	
Methyl-t-Butyl Ether (MTBE)	A	25.0	26.0	1.284849	1.333536		3.8	
Styrene	A	25.0	26.1	1.112308	1.161437		4.4	
Tetrachloroethene	A	25.0	26.2	0.4072305	0.4272855		4.9	
Toluene	A	25.0	25.4	1.051967	1.068104		1.5	
Toluene-d8	A	25.0	24.8	1.532044	1.522723		-0.6	
trans-1,2-Dichloroethene	A	25.0	25.6	0.379477	0.388476		2.4	
trans-1,3-Dichloropropene	L0	25.0	21.1	0.4965241	0.5569807		-15.6	
Trichloroethene	A	25.0	25.2	0.38071	0.3838373		0.8	
Trichlorofluoromethane	A	25.0	24.2	0.4504269	0.4360119		-3.2	
Vinyl acetate	L0	125	128	0.9844602	1.141637		2.7	
Vinyl chloride	A	25.0	23.1	0.4917703	0.4551719		-7.4	
Xylenes, total	A	75.0	77.9	0.7419547	0.7705568		3.9	

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

Calibration Type Legend:
A: Average RF
L: Linear through Intercept
Q: Quadratic
L0: Linear forced through Zero
L1: 1/x Weighted Linear through Intercept
L2: 1/x2 Weighted Linear through Intercept
L01: 1/x Weighted Linear forced through Zero
L02: 1/x2 Weighted Linear forced through Zero

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6635.D
Acq On : 3 Dec 2009 12:41
Sample : RL90313-CCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 14:55:46 2009

Vial: 37
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 13:28:59 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	809705	25.00	ug/L	0.00 100.00%
43) CI20	Chlorobenzene-D5	7.96	117	652545	25.00	ug/L	0.00 100.00%
62) CI30	1,4-Dichlorobenzene-	9.87	152	348104	25.00	ug/L	0.00 100.00%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	275222	24.50	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	98.00%		
31) CS15	1,2-Dichloroethane-D	5.38	65	428915	23.19	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	92.76%		
44) CS05	Toluene-D8	6.81	98	993645	24.85	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	99.40%		
61) CS10	p-Bromofluorobenzene	8.90	174	270324	24.58	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	98.32%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.53	85	310780	27.35	ug/L	99
3) C010	Chloromethane	1.72	50	551995	24.41	ug/L	99
4) C020	Vinyl chloride	1.85	62	368555	23.14	ug/L	100
5) C015	Bromomethane	2.22	94	80205	14.81	ug/L	98
6) C025	Chloroethane	2.35	64	163562	26.74	ug/L	100
7) C275	Trichlorofluorometha	2.61	101	353041	24.20	ug/L	100
8) C045	1,1-Dichloroethene	3.16	96	244412	26.12	ug/L	97
9) C030	Methylene chloride	3.65	84	342154	23.49	ug/L	98
10) C040	Carbon disulfide	3.36	76	717003	28.72	ug/L	98
11) C036	Acrolein	3.10	56	270562	546.95	ug/L	99
12) C038	Acrylonitrile	3.89	53	1309063	136.03	ug/L	98
13) C035	Acetone	3.25	43	1302536	145.69	ug/L	96
14) C300	Acetonitrile	3.54	41	4075100	1179.84	ug/L	99
15) C276	Iodomethane	3.31	142	331877	26.12	ug/L	99
16) C291	1,1,2 Trichloro-1,2,	3.15	101	249419	28.05	ug/L	99
17) C962	T-butyl Methyl Ether	3.86	73	1079771	25.95	ug/L	100
18) C057	trans-1,2-Dichloroet	3.88	96	314551	25.59	ug/L	97
19) C255	Methyl Acetate	3.55	43	1010849	26.88	ug/L	99
20) C050	1,1-Dichloroethane	4.25	63	672337	25.23	ug/L	97
21) C125	Vinyl Acetate	4.28	43	4621944	128.34	ug/L	100
22) C051	2,2-Dichloropropane	4.71	77	319351	25.19	ug/L	97
23) C056	cis-1,2-Dichloroethe	4.74	96	348917	25.28	ug/L	97
24) C272	Tetrahydrofuran	4.95	42	1258515	129.75	ug/L	99
25) C222	Bromochloromethane	4.94	128	162996	25.24	ug/L	97
26) C060	Chloroform	4.99	83	585324	25.62	ug/L	98
27) C115	1,1,1-Trichloroethan	5.11	97	418189	22.49	ug/L	99
28) C120	Carbon tetrachloride	5.23	117	319544	28.09	ug/L	99
29) C116	1,1-Dichloropropene	5.23	75	441359	25.76	ug/L	98
32) C165	Benzene	5.41	78	1268516	25.36	ug/L	99
33) C065	1,2-Dichloroethane	5.44	62	589864	24.95	ug/L	99
34) C110	2-Butanone	4.74	43	1881961	137.85	ug/L	99
35) C256	Cyclohexane	5.13	56	747651	27.46	ug/L	99
36) C150	Trichloroethene	5.89	95	310795	25.21	ug/L	99
37) C140	1,2-Dichloropropane	6.08	63	351269	25.14	ug/L	98
38) C278	Dibromomethane	6.19	93	201023	25.84	ug/L	99

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6635.D
Acq On : 3 Dec 2009 12:41
Sample : RL90313-CCV1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 14:55:46 2009

Vial: 37
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 13:28:59 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	324854	20.11 ug/L		98
40) C161	2-Chloroethylvinyl E	6.49	63	1305759	114.58 ug/L		99
41) C012	Methylcycolhexane	6.02	83	578403	28.26 ug/L		99
42) C145	cis-1,3-Dichloroprop	6.62	75	412368	21.05 ug/L		98
45) C230	Toluene	6.86	92	696986	25.38 ug/L		99
46) C170	trans-1,3-Dichloropr	7.05	75	363455	21.11 ug/L		100
47) C284	Ethyl Methacrylate	7.07	69	395872	23.77 ug/L	#	84
48) C160	1,1,2-Trichloroethan	7.20	83	228860	26.38 ug/L		95
49) C210	4-Methyl-2-pentanone	6.72	43	3477658	137.58 ug/L		99
50) C220	Tetrachloroethene	7.29	166	278823	26.23 ug/L		98
51) C221	1,3-Dichloropropane	7.34	76	473096	26.01 ug/L		97
52) C155	Dibromochloromethane	7.53	129	178479	24.58 ug/L		96
53) C163	1,2-Dibromoethane	7.62	107	274327	27.41 ug/L		99
54) C215	2-Hexanone	7.36	43	2318563	142.37 ug/L		99
55) C235	Chlorobenzene	7.98	112	709483	25.57 ug/L		98
56) C281	1,1,1,2-Tetrachloroe	8.05	131	229716	21.60 ug/L		98
57) C240	Ethylbenzene	8.04	91	1285253	25.53 ug/L		99
58) C246	m,p-Xylene	8.13	106	1009339	51.99 ug/L		97
59) C247	o-Xylene	8.46	106	499130	25.90 ug/L		98
60) C245	Styrene	8.48	104	757890	26.10 ug/L		99
63) C180	Bromoform	8.68	173	98659	25.74 ug/L		99
64) C966	Isopropylbenzene	8.75	105	1251651	26.41 ug/L		99
65) C301	Bromobenzene	9.05	156	298506	25.79 ug/L		97
66) C225	1,1,2,2-Tetrachloroe	9.03	83	401431	26.86 ug/L		99
67) C282	1,2,3-Trichloropropa	9.08	110	126460	25.67 ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.07	53	461477	118.92 ug/L		90
69) C302	n-Propylbenzene	9.08	91	1625309	26.69 ug/L		100
70) C303	2-Chlorotoluene	9.19	126	295005	26.35 ug/L		100
71) C289	4-Chlorotoluene	9.28	126	295911	26.34 ug/L		100
72) C304	1,3,5-Trimethylbenze	9.22	105	1112835	26.37 ug/L		99
73) C306	tert-Butylbenzene	9.50	134	207153	26.66 ug/L		100
74) C307	1,2,4-Trimethylbenze	9.54	105	1137748	26.33 ug/L		99
75) C308	sec-Butylbenzene	9.68	105	1421551	26.91 ug/L		99
76) C260	1,3-Dichlorobenzene	9.81	146	585091	25.71 ug/L		96
77) C309	4-Isopropyltoluene	9.80	119	1124991	26.82 ug/L		99
78) C267	1,4-Dichlorobenzene	9.89	146	582505	25.18 ug/L		96
79) C249	1,2-Dichlorobenzene	10.22	146	581996	26.06 ug/L		95
80) C310	n-Butylbenzene	10.14	91	1143494	26.70 ug/L		98
81) C286	1,2-Dibromo-3-Chloro	10.90	75	60903	19.61 ug/L		94
82) C313	1,2,4-Trichlorobenze	11.57	180	400093	25.97 ug/L		97
83) C316	Hexachlorobutadiene	11.68	225	201908	26.78 ug/L		97
84) C314	Naphthalene	11.78	128	1208040	26.49 ug/L		100
85) C934	1,2,3-Trichlorobenze	11.98	180	381895	26.06 ug/L		95

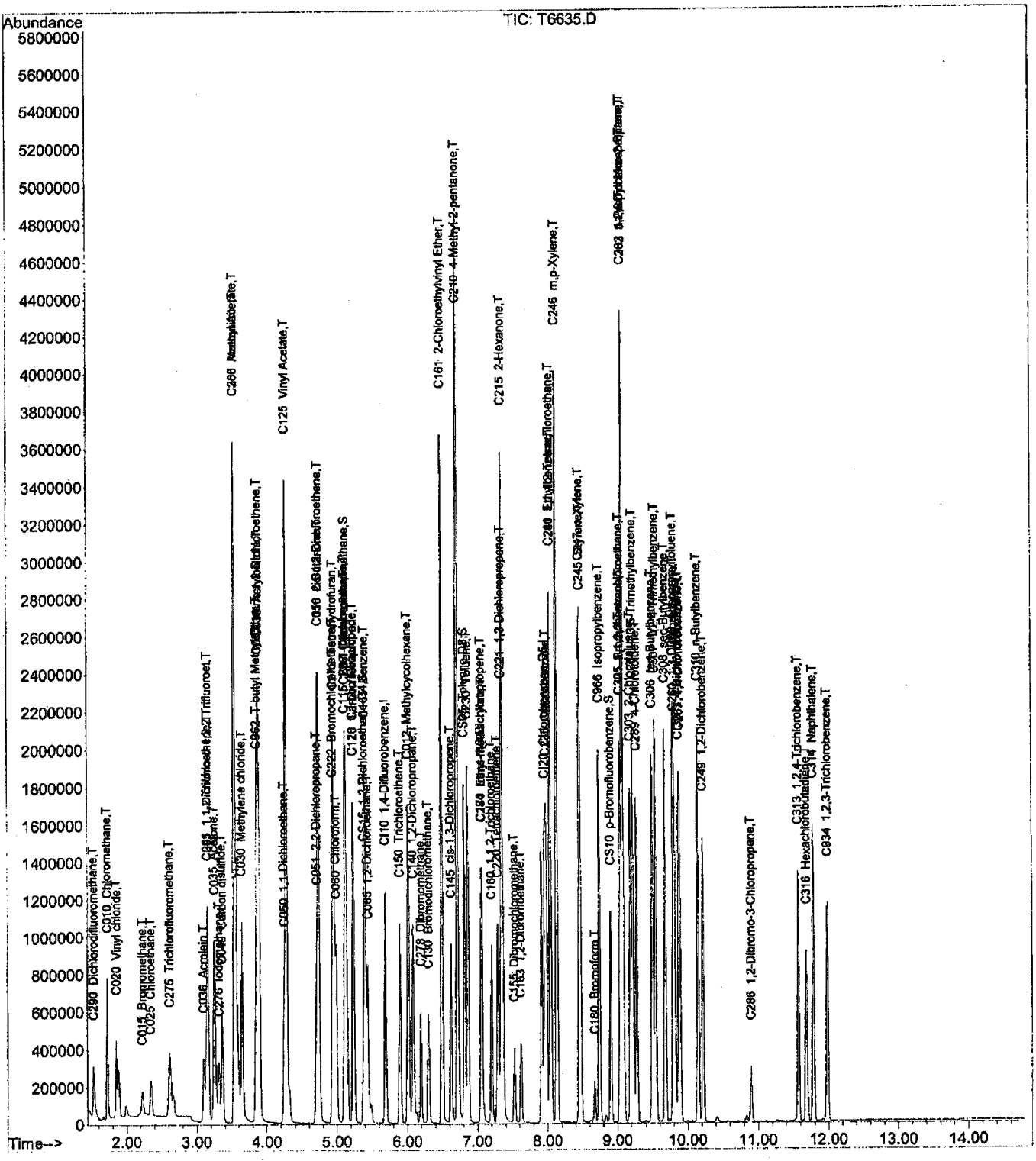
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6635.D
Acq On : 3 Dec 2009 12:41
Sample : RL90313-CCV1
Misc :
MS Integration Params: RTEINT.P

Vial: 37
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 14:55:46 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 13:28:59 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M

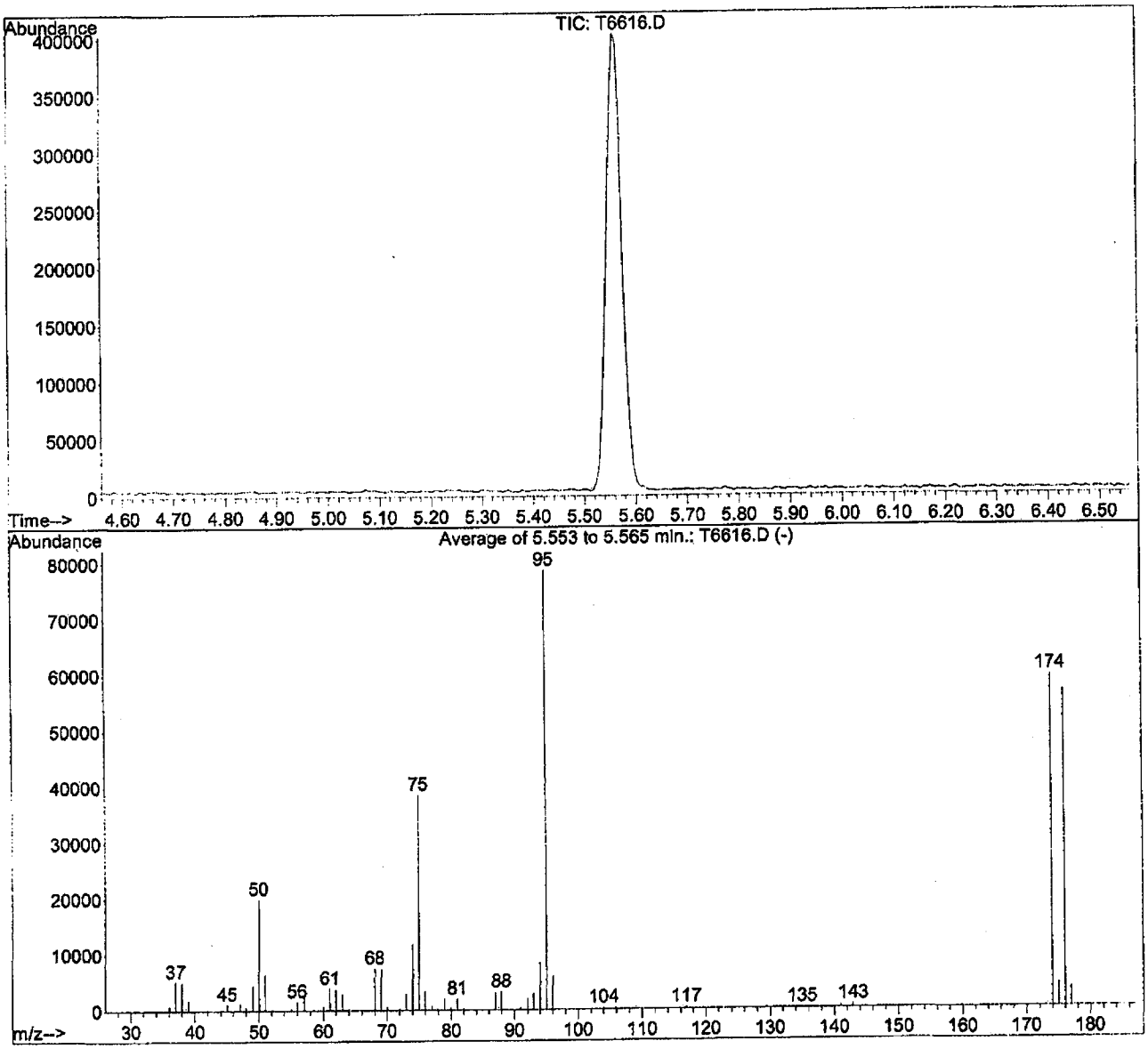


BFB Tune Evaluation

Data File : H:\GCMS_VOA\T\120209\T6616.D
Acq On : 2 Dec 2009 23:55
Sample : RL90211-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 18
Operator: TWS
Inst : 5975 T
Multiplr: 1.00

Method : C:\MSDCHEM\1\DAT...09\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML



Peak Apex is scan: 668 (5.56 min)
Average of 3 scans: 667,668,669 minus background scan 648 (5.44 min)

Target Mass	Rel. to Mass	Lower Limit,%	Upper Limit,%	Rel. Abn,%	Raw Abn	Result Pass/Fail
50	95	15	40	25.5	20034	PASS
75	95	30	60	49.1	38634	PASS
95	95	100	100	100.0	78696	PASS
96	95	5	9	7.6	5983	PASS
173	174	0	2	0.2	141	PASS
174	95	50	100	75.5	59413	PASS
175	174	5	9	7.1	4238	PASS
176	174	95	101	95.4	56666	PASS
177	176	5	9	6.3	3558	PASS

Average of 5.553 to 5.565 min.: T6616.D
RL90211-TUN1
Modified:subtracted

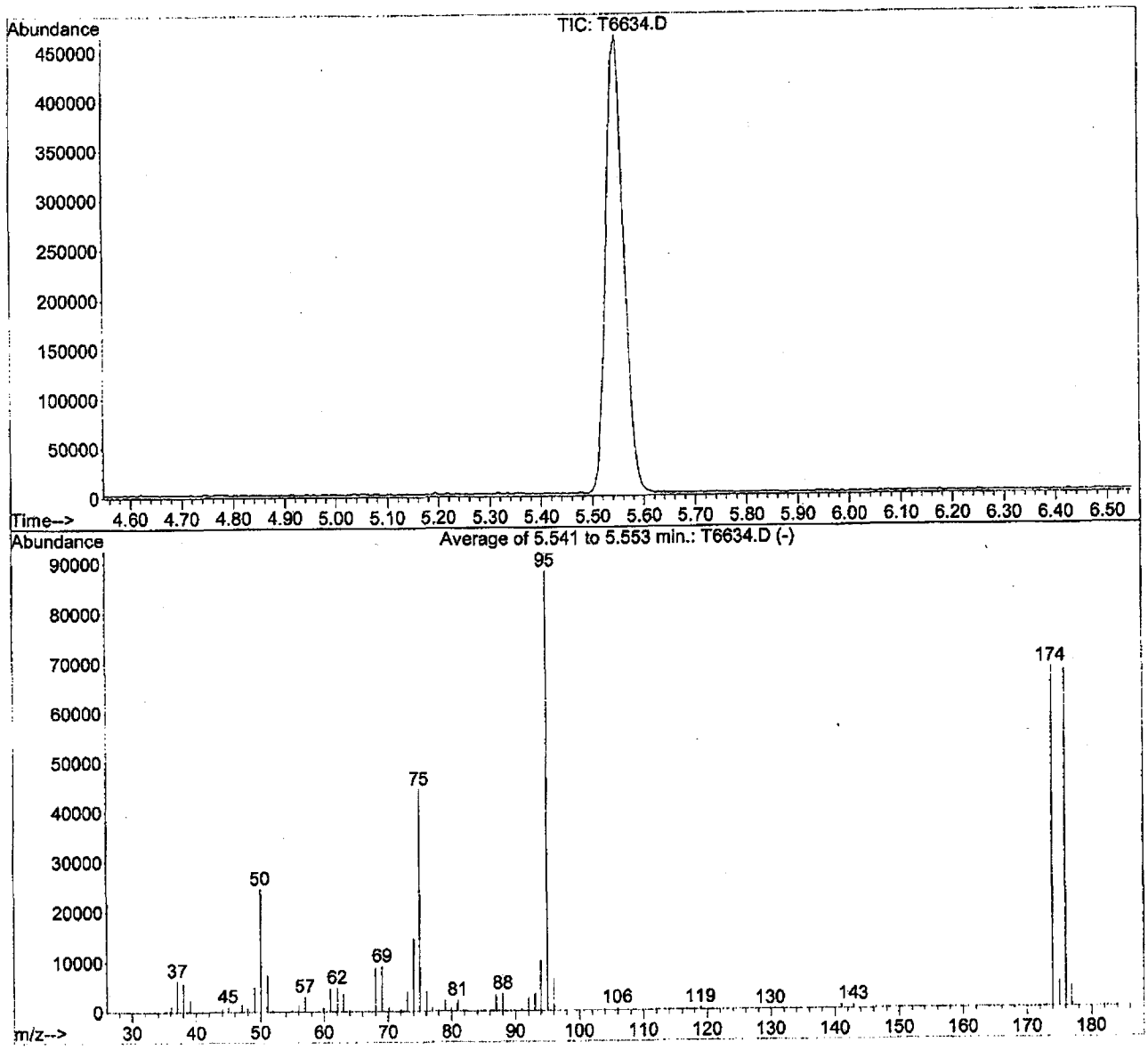
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	899	57.05	3026	76.00	3385	95.00	78696
37.05	5193	60.05	724	77.05	672	96.00	5983
38.05	5081	61.05	3965	78.95	2057	141.00	610
39.05	1936	62.00	3728	79.95	551	142.90	614
45.05	1165	63.00	2980	81.00	2025	174.00	59413
47.05	1338	68.05	7530	87.00	3147	174.95	4238
47.95	754	69.05	7399	87.95	3285	176.00	56666
49.05	4537	70.05	696	90.95	467	176.95	3558
50.05	20034	73.05	3010	92.00	2114		
51.05	6431	74.05	11789	93.00	3020		
56.00	1586	75.05	38634	94.00	8482		

BFB Tune Evaluation

Data File : H:\GCMS_VOA\T\120309\T6634.D
Acq On : 3 Dec 2009 12:19
Sample : RL90313-TUN1
Misc :
MS Integration Params: RTEINT.P

Vial: 36
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Method : C:\MSDCHEM\1\DAT...09\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML



Peak Apex is scan: 666 (5.55 min)
Average of 3 scans: 665,666,667 minus background scan 646 (5.43 min)

Target Mass	Rel. to Mass	Lower Limit,%	Upper Limit,%	Rel. Abn,%	Raw Abn	Result Pass/Fail
50	95	15	40	27.9	24634	PASS
75	95	30	60	50.5	44549	PASS
95	95	100	100	100.0	88245	PASS
96	95	5	9	7.2	6381	PASS
173	174	0	2	0.5	350	PASS
174	95	50	100	77.4	68312	PASS
175	174	5	9	7.6	5174	PASS
176	174	95	101	99.2	67797	PASS
177	176	5	9	6.2	4178	PASS

Average of 5.541 to 5.553 min.: T6634.D
RL90313-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1197	54.95	458	73.00	4053	92.00	2685
37.05	6340	56.00	1494	74.05	14680	93.05	3536
38.05	5791	57.00	3138	75.05	44549	94.00	10204
39.05	2523	59.95	1014	76.10	4153	95.00	88245
44.00	785	61.00	4715	76.95	829	96.05	6381
45.00	1090	62.10	4874	78.95	2242	105.95	565
47.05	1529	63.00	3707	79.95	728	118.95	489
47.95	750	68.00	8761	80.95	2309	141.00	748
49.05	4995	69.05	9169	86.95	3447	142.90	864
50.05	24634	70.10	891	88.00	3548	174.00	68312
51.05	7381	72.00	469	90.95	477	175.00	5174

Average of 5.541 to 5.553 min.: T6634.D
RL90313-TUN1
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.00	67797						
176.95	4178						

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water Laboratory ID: 9L03027-BLK1 File ID: T6637.D

Sampled: Prepared: 12/03/09 11:54 Analyzed: 12/03/09 13:54

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9L03027 Sequence: RL90313 Calibration: R9L0204 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	1.0	U
79-00-5	1,1,2-Trichloroethane	1	1.0	U
75-34-3	1,1-Dichloroethane	1	1.0	U
75-35-4	1,1-Dichloroethene	1	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1	1.0	U
106-93-4	1,2-Dibromoethane	1	1.0	U
95-50-1	1,2-Dichlorobenzene	1	1.0	U
107-06-2	1,2-Dichloroethane	1	1.0	U
78-87-5	1,2-Dichloropropane	1	1.0	U
541-73-1	1,3-Dichlorobenzene	1	1.0	U
106-46-7	1,4-Dichlorobenzene	1	1.0	U
78-93-3	2-Butanone	1	5.0	U
591-78-6	2-Hexanone	1	5.0	U
108-10-1	4-Methyl-2-pentanone	1	5.0	U
67-64-1	Acetone	1	5.0	U
71-43-2	Benzene	1	1.0	U
75-27-4	Bromodichloromethane	1	1.0	U
75-25-2	Bromoform	1	1.0	U
74-83-9	Bromomethane	1	1.0	U
75-15-0	Carbon disulfide	1	1.0	U
56-23-5	Carbon Tetrachloride	1	1.0	U
108-90-7	Chlorobenzene	1	1.0	U
75-00-3	Chloroethane	1	1.0	U
67-66-3	Chloroform	1	1.0	U
74-87-3	Chloromethane	1	1.0	U
156-59-2	cis-1,2-Dichloroethene	1	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1	1.0	U
110-82-7	Cyclohexane	1	1.0	U
124-48-1	Dibromochloromethane	1	1.0	U
75-71-8	Dichlorodifluoromethane	1	1.0	U
100-41-4	Ethylbenzene	1	1.0	U
98-82-8	Isopropylbenzene	1	1.0	U
79-20-9	Methyl Acetate	1	1.0	U
108-87-2	Methylcyclohexane	1	1.0	U
75-09-2	Methylene Chloride	1	1.0	U
1634-04-4	Methyl-t-Butyl Ether (MTBE)	1	1.0	U

Form 1

ORGANIC ANALYSIS DATA SHEET

8260B

Blank

Laboratory:	TestAmerica Buffalo			SDG:	
Client:	ARCADIS U.S., Inc. - Albany, NY			Project:	Arcadis, Geraghty & Miller - NY9A8463
Matrix:	Water	Laboratory ID:	9L03027-BLK1	File ID:	T6637.D
Sampled:		Prepared:	12/03/09 11:54	Analyzed:	12/03/09 13:54
Solids:		Preparation:	5030B MS	Initial/Final:	5 mL / 5 mL
Batch:	9L03027	Sequence:	RL90313	Calibration:	R9L0204
Instrument:	HP5975T				

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	1	1.0	U
127-18-4	Tetrachloroethene	1	1.0	U
108-88-3	Toluene	1	1.0	U
156-60-5	trans-1,2-Dichloroethene	1	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1	1.0	U
79-01-6	Trichloroethene	1	1.0	U
75-69-4	Trichlorofluoromethane	1	1.0	U
75-01-4	Vinyl chloride	1	1.0	U
1330-20-7	Xylenes, total	1	2.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.8	95	66 - 137	
4-Bromofluorobenzene	25.0	24.2	97	73 - 120	
Toluene-d8	25.0	24.7	99	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	277160	9.87	348104	9.87	
1,4-Difluorobenzene	682444	5.69	809705	5.69	
Chlorobenzene-d5	535208	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6637.D
Acq On : 3 Dec 2009 13:54
Sample : 9L03027-BLK1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 14:56:42 2009

Vial: 39
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 15:01:03 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

NO TIC SK 12/3/09 LH

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	682444	25.00	ug/L	0.00 84.28%
43) CI20	Chlorobenzene-D5	7.96	117	535208	25.00	ug/L	0.00 82.02%
62) CI30	1,4-Dichlorobenzene-	9.87	152	277160	25.00	ug/L	0.00 79.62%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	221132	23.35	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	93.40%		
31) CS15	1,2-Dichloroethane-D	5.38	65	371765	23.85	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	95.40%		
44) CS05	Toluene-D8	6.81	98	811114	24.73	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	98.92%		
61) CS10	p-Bromofluorobenzene	8.91	174	218582	24.23	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	96.92%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorome	0.00	85	0	N.D.		
3) C010	Chloromethane	1.72	50	1563	N.D.		
4) C020	Vinyl chloride	1.85	62	904	N.D.		
5) C015	Bromomethane	2.24	94	596	N.D.		
6) C025	Chloroethane	2.36	64	966	N.D.		
7) C275	Trichlorofluoromet	0.00	101	0	N.D.		
8) C045	1,1-Dichloroethene	0.00	96	0	N.D.		
9) C030	Methylene chloride	3.65	84	1796	N.D.		
10) C040	Carbon disulfide	3.37	76	73	N.D.		
11) C036	Acrolein	3.11	56	1485	3.56	ug/L #	70
12) C038	Acrylonitrile	3.89	53	129	N.D.		
13) C035	Acetone	3.25	43	2340	N.D.		
14) C300	Acetonitrile	3.53	41	942	N.D.		
15) C276	Iodomethane	0.00	142	0	N.D.		
16) C291	1,1,2 Trichloro-1,	0.00	101	0	N.D.		
17) C962	T-butyl Methyl Eth	0.00	73	0	N.D.		
18) C057	trans-1,2-Dichloro	0.00	96	0	N.D.		
19) C255	Methyl Acetate	3.56	43	1311	N.D.		
20) C050	1,1-Dichloroethane	0.00	63	0	N.D.		
21) C125	Vinyl Acetate	4.27	43	672	N.D.		
22) C051	2,2-Dichloropropan	0.00	77	0	N.D.		
23) C056	cis-1,2-Dichloroet	0.00	96	0	N.D.		
24) C272	Tetrahydrofuran	4.96	42	9306	N.D.		
25) C222	Bromochloromethane	0.00	128	0	N.D.		
26) C060	Chloroform	5.00	83	774	N.D.		
27) C115	1,1,1-Trichloroeth	0.00	97	0	N.D.		
28) C120	Carbon tetrachlori	0.00	117	0	N.D.		
29) C116	1,1-Dichloropropen	0.00	75	0	N.D.		
32) C165	Benzene	5.41	78	93	N.D.		
33) C065	1,2-Dichloroethane	5.40	62	387	N.D.		
34) C110	2-Butanone	4.75	43	2644	N.D.		
35) C256	Cyclohexane	5.11	56	82	N.D.		
36) C150	Trichloroethene	0.00	95	0	N.D.		
37) C140	1,2-Dichloropropan	0.00	63	0	N.D.		
38) C278	Dibromomethane	0.00	93	0	N.D.		

12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6637.D
Acq On : 3 Dec 2009 13:54
Sample : 9L03027-BLK1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 14:56:42 2009

Vial: 39
Operator: LH
Inst : 5975 T
Multiplr: 1.00
Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 15:01:03 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards			R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
39)	C130	Bromodichlorometha	0.00	83	0	N.D.		
40)	C161	2-Chloroethylvinyl	0.00	63	0	N.D.		
41)	C012	Methylcycolhexane	6.02	83	75	N.D.		
42)	C145	cis-1,3-Dichloropr	0.00	75	0	N.D.		
45)	C230	Toluene	6.86	92	718	N.D.		
46)	C170	trans-1,3-Dichloro	0.00	75	0	N.D.		
47)	C284	Ethyl Methacrylate	0.00	69	0	N.D.		
48)	C160	1,1,2-Trichloroeth	0.00	83	0	N.D.		
49)	C210	4-Methyl-2-pentano	6.70	43	923	N.D.		
50)	C220	Tetrachloroethene	0.00	166	0	N.D.		
51)	C221	1,3-Dichloropropan	0.00	76	0	N.D.		
52)	C155	Dibromochlorometha	0.00	129	0	N.D.		
53)	C163	1,2-Dibromoethane	0.00	107	0	N.D.		
54)	C215	2-Hexanone	7.35	43	666	N.D.		
55)	C235	Chlorobenzene	0.00	112	0	N.D.		
56)	C281	1,1,1,2-Tetrachlor	0.00	131	0	N.D.		
57)	C240	Ethylbenzene	8.05	91	226	N.D.		
58)	C246	m,p-Xylene	0.00	106	0	N.D.		
59)	C247	o-Xylene	0.00	106	0	N.D.		
60)	C245	Styrene	0.00	104	0	N.D.		
63)	C180	Bromoform	0.00	173	0	N.D.		
64)	C966	Isopropylbenzene	8.73	105	136	N.D.		
65)	C301	Bromobenzene	0.00	156	0	N.D.		
66)	C225	1,1,2,2-Tetrachlor	8.90	83	95	N.D.		
67)	C282	1,2,3-Trichloropro	0.00	110	0	N.D.		
68)	C283	t-1,4-Dichloro-2-B	0.00	53	0	N.D.		
69)	C302	n-Propylbenzene	9.17	91	78	N.D.		
70)	C303	2-Chlorotoluene	0.00	126	0	N.D.		
71)	C289	4-Chlorotoluene	0.00	126	0	N.D.		
72)	C304	1,3,5-Trimethylben	9.23	105	234	N.D.		
73)	C306	tert-Butylbenzene	0.00	134	0	N.D.		
74)	C307	1,2,4-Trimethylben	9.55	105	445	N.D.		
75)	C308	sec-Butylbenzene	9.68	105	174	N.D.		
76)	C260	1,3-Dichlorobenzen	9.81	146	81	N.D.		
77)	C309	4-Isopropyltoluene	9.79	119	183	N.D.		
78)	C267	1,4-Dichlorobenzen	9.89	146	189	N.D.		
79)	C249	1,2-Dichlorobenzen	10.22	146	153	N.D.		
80)	C310	n-Butylbenzene	10.16	91	155	N.D.		
81)	C286	1,2-Dibromo-3-Chlo	0.00	75	0	N.D.		
82)	C313	1,2,4-Trichloroben	11.57	180	331	N.D.		
83)	C316	Hexachlorobutadien	0.00	225	0	N.D.		
84)	C314	Naphthalene	11.79	128	2210	N.D.		
85)	C934	1,2,3-Trichloroben	12.00	180	478	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

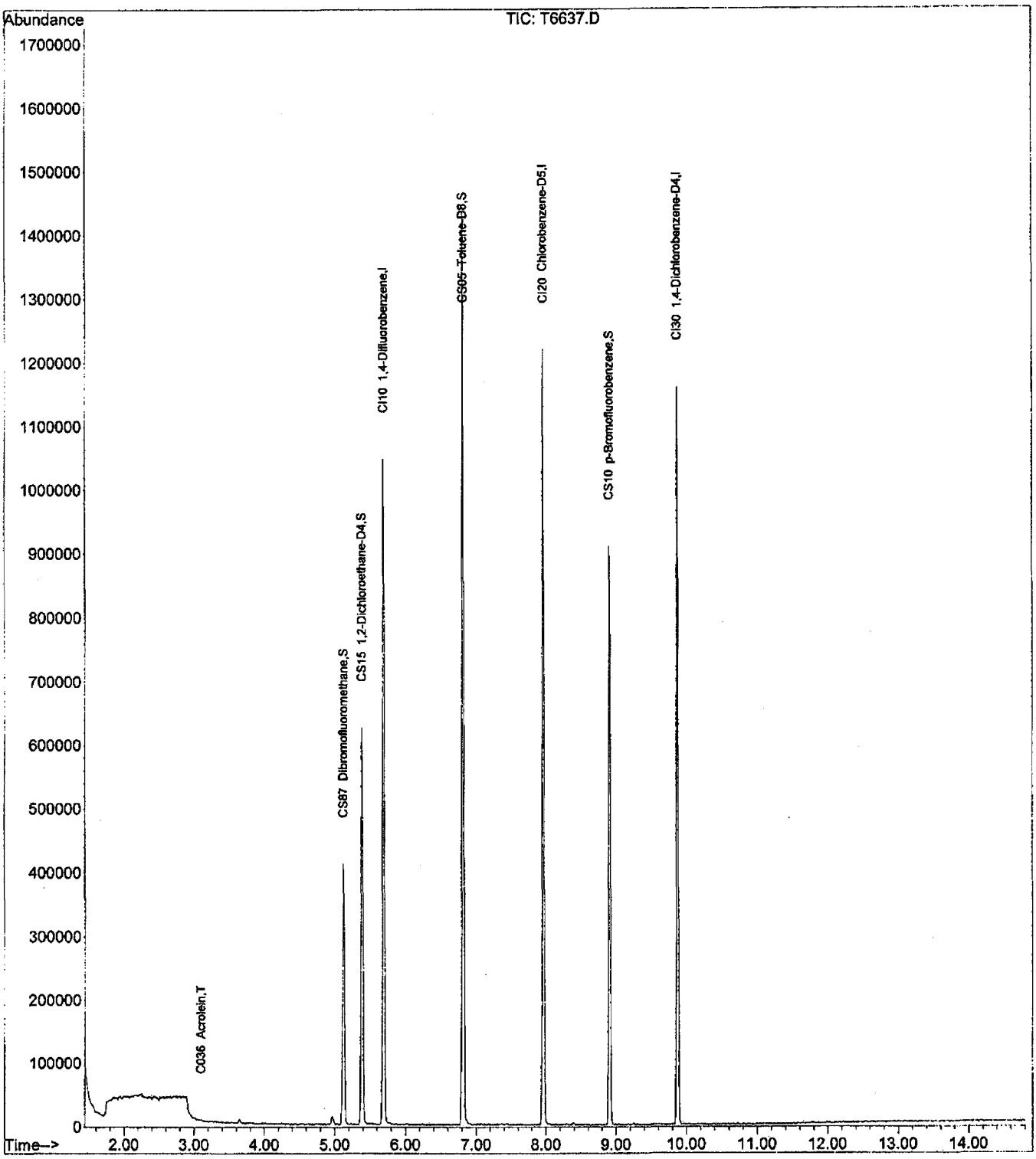
12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6637.D
Acq On : 3 Dec 2009 13:54
Sample : 9L03027-BLK1
Misc :
MS Integration Params: RTEINT.P

Vial: 39
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 14:56:42 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 15:01:03 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

LCS

Laboratory: TestAmerica Buffalo | SDG:

Client: ARCADIS U.S., Inc. - Albany, NY | Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water | Laboratory ID: 9L03027-BS1 | File ID: T6636.D

Sampled: | Prepared: 12/03/09 11:54 | Analyzed: 12/03/09 13:15

Solids: | Preparation: 5030B MS | Initial/Final: 5 mL / 5 mL

Batch: 9L03027 | Sequence: RL90313 | Calibration: R9L0204 | Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
71-55-6	1,1,1-Trichloroethane	1	22.9	
79-34-5	1,1,2,2-Tetrachloroethane	1	25.8	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	28.3	
79-00-5	1,1,2-Trichloroethane	1	25.2	
75-34-3	1,1-Dichloroethane	1	25.0	
75-35-4	1,1-Dichloroethene	1	26.0	
120-82-1	1,2,4-Trichlorobenzene	1	25.0	
96-12-8	1,2-Dibromo-3-chloropropane	1	18.8	
106-93-4	1,2-Dibromoethane	1	25.6	
95-50-1	1,2-Dichlorobenzene	1	24.4	
107-06-2	1,2-Dichloroethane	1	24.6	
78-87-5	1,2-Dichloropropane	1	24.6	
541-73-1	1,3-Dichlorobenzene	1	24.0	
106-46-7	1,4-Dichlorobenzene	1	23.9	
78-93-3	2-Butanone	1	127	
591-78-6	2-Hexanone	1	131	
108-10-1	4-Methyl-2-pentanone	1	129	
67-64-1	Acetone	1	136	
71-43-2	Benzene	1	24.8	
75-27-4	Bromodichloromethane	1	19.7	
75-25-2	Bromoform	1	25.7	
74-83-9	Bromomethane	1	26.2	
75-15-0	Carbon disulfide	1	28.9	
56-23-5	Carbon Tetrachloride	1	28.6	
108-90-7	Chlorobenzene	1	24.6	
75-00-3	Chloroethane	1	28.3	
67-66-3	Chloroform	1	25.1	
74-87-3	Chloromethane	1	25.4	
156-59-2	cis-1,2-Dichloroethene	1	25.1	
10061-01-5	cis-1,3-Dichloropropene	1	20.2	
110-82-7	Cyclohexane	1	27.0	
124-48-1	Dibromochloromethane	1	24.4	
75-71-8	Dichlorodifluoromethane	1	28.4	
100-41-4	Ethylbenzene	1	24.8	
98-82-8	Isopropylbenzene	1	25.3	
79-20-9	Methyl Acetate	1	25.5	
108-87-2	Methylcyclohexane	1	27.5	
75-09-2	Methylene Chloride	1	23.4	
1634-04-4	Methyl-t-Butyl Ether (MTBE)	1	25.1	

Form 1
ORGANIC ANALYSIS DATA SHEET
8260B

LCS

Laboratory: TestAmerica Buffalo SDG:

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis, Geraghty & Miller - NY9A8463

Matrix: Water Laboratory ID: 9L03027-BS1 File ID: T6636.D

Sampled: Prepared: 12/03/09 11:54 Analyzed: 12/03/09 13:15

Solids: Preparation: 5030B MS Initial/Final: 5 mL / 5 mL

Batch: 9L03027 Sequence: RL90313 Calibration: R9L0204 Instrument: HP5975T

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
100-42-5	Styrene	1	25.1	
127-18-4	Tetrachloroethene	1	25.3	
108-88-3	Toluene	1	24.2	
156-60-5	trans-1,2-Dichloroethene	1	25.1	
10061-02-6	trans-1,3-Dichloropropene	1	20.3	
79-01-6	Trichloroethene	1	24.4	
75-69-4	Trichlorofluoromethane	1	26.2	
75-01-4	Vinyl chloride	1	25.0	
1330-20-7	Xylenes, total	1	75.8	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	25.0	23.8	95	66 - 137	
4-Bromofluorobenzene	25.0	24.5	98	73 - 120	
Toluene-d8	25.0	25.2	101	71 - 126	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	323794	9.87	348104	9.87	
1,4-Difluorobenzene	741929	5.69	809705	5.69	
Chlorobenzene-d5	596713	7.96	652545	7.96	

* Values outside of QC limits

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6636.D
Acq On : 3 Dec 2009 13:15
Sample : 9L03027-BS1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 14:56:18 2009

#39=LS

Vial: 38
Operator: LH
Inst : 5975 T
Multiplr: 1.00
Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 15:01:03 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) CI10	1,4-Difluorobenzene	5.69	114	741929	25.00	ug/L	0.00 91.63%
43) CI20	Chlorobenzene-D5	7.96	117	596713	25.00	ug/L	0.00 91.44%
62) CI30	1,4-Dichlorobenzene-	9.87	152	323794	25.00	ug/L	0.00 93.02%
System Monitoring Compounds							
30) CS87	Dibromofluoromethane	5.12	111	263391	25.59	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery =	102.36%		
31) CS15	1,2-Dichloroethane-D	5.38	65	403118	23.79	ug/L	0.00
Spiked Amount	25.000	Range	66 - 137	Recovery =	95.16%		
44) CS05	Toluene-D8	6.81	98	922356	25.22	ug/L	0.00
Spiked Amount	25.000	Range	71 - 126	Recovery =	100.88%		
61) CS10	p-Bromofluorobenzene	8.90	174	246581	24.52	ug/L	0.00
Spiked Amount	25.000	Range	73 - 120	Recovery =	98.08%		
Target Compounds							Qvalue
2) C290	Dichlorodifluorometh	1.52	85	295224	28.35	ug/L	100
3) C010	Chloromethane	1.72	50	526655	25.41	ug/L	99
4) C020	Vinyl chloride	1.85	62	365183	25.02	ug/L	97
5) C015	Bromomethane	2.22	94	130055	26.20	ug/L	95
6) C025	Chloroethane	2.35	64	158686	28.31	ug/L	98
7) C275	Trichlorofluorometha	2.61	101	350337	26.21	ug/L	99
8) C045	1,1-Dichloroethene	3.16	96	222534	25.95	ug/L	99
9) C030	Methylene chloride	3.65	84	311970	23.37	ug/L	97
10) C040	Carbon disulfide	3.36	76	661818	28.90	ug/L	98
11) C036	Acrolein	3.10	56	234636	517.66	ug/L	100
12) C038	Acrylonitrile	3.89	53	1127649	127.88	ug/L	98
13) C035	Acetone	3.25	43	1115068	136.12	ug/L	98
14) C300	Acetonitrile	3.54	41	3505750	1107.72	ug/L	99
15) C276	Iodomethane	3.31	142	303123	26.03	ug/L	99
16) C291	1,1,2 Trichloro-1,2,	3.14	101	230469	28.29	ug/L	98
17) C962	T-butyl Methyl Ether	3.86	73	955556	25.06	ug/L	100
18) C057	trans-1,2-Dichloroet	3.88	96	282189	25.06	ug/L	95
19) C255	Methyl Acetate	3.55	43	879847	25.53	ug/L	100
20) C050	1,1-Dichloroethane	4.25	63	610098	24.99	ug/L	100
21) C125	Vinyl Acetate	4.28	43	4011422	121.57	ug/L	100
22) C051	2,2-Dichloropropane	4.71	77	305942	26.34	ug/L	98
23) C056	cis-1,2-Dichloroethe	4.73	96	317437	25.10	ug/L	96
24) C272	Tetrahydrofuran	4.95	42	1073870	120.82	ug/L	99
25) C222	Bromochloromethane	4.94	128	147776	24.97	ug/L	96
26) C060	Chloroform	4.99	83	525891	25.12	ug/L	97
27) C115	1,1,1-Trichloroethan	5.11	97	389843	22.88	ug/L	100
28) C120	Carbon tetrachloride	5.23	117	298367	28.55	ug/L	99
29) C116	1,1-Dichloropropene	5.23	75	400693	25.53	ug/L	98
32) C165	Benzene	5.41	78	1134206	24.75	ug/L	100
33) C065	1,2-Dichloroethane	5.44	62	532336	24.57	ug/L	99
34) C110	2-Butanone	4.74	43	1584378	126.65	ug/L	99
35) C256	Cyclohexane	5.13	56	672898	26.97	ug/L	100
36) C150	Trichloroethene	5.89	95	276211	24.45	ug/L	99
37) C140	1,2-Dichloropropane	6.08	63	314265	24.55	ug/L	98
38) C278	Dibromomethane	6.19	93	180140	25.27	ug/L	98

AM 12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6636.D
Acq On : 3 Dec 2009 13:15
Sample : 9L03027-BS1
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 03 14:56:18 2009

Vial: 38
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Results File: R9L0204-6PT.RES

Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 15:01:03 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M
IS QA File : H:\GCMS_VOA\T\120309\T6635.D (3 Dec 2009 12:41)

Internal Standards		R.T.	QIon	Response	Conc	Units		Dev(Min) Rcv(Ar)
39) C130	Bromodichloromethane	6.30	83	291724	19.71	ug/L		98
40) C161	2-Chloroethylvinyl E	6.49	63	1085898	103.99	ug/L		99
41) C012	Methylcycolhexane	6.01	83	515580	27.49	ug/L		98
42) C145	cis-1,3-Dichloroprop	6.62	75	362696	20.21	ug/L		100
45) C230	Toluene	6.87	92	607934	24.21	ug/L		99
46) C170	trans-1,3-Dichloropr	7.05	75	319280	20.28	ug/L		100
47) C284	Ethyl Methacrylate	7.07	69	336219	22.08	ug/L	#	84
48) C160	1,1,2-Trichloroethan	7.20	83	199981	25.21	ug/L		96
49) C210	4-Methyl-2-pentanone	6.72	43	2982152	129.02	ug/L		100
50) C220	Tetrachloroethene	7.29	166	246000	25.31	ug/L		96
51) C221	1,3-Dichloropropane	7.34	76	406776	24.45	ug/L		97
52) C155	Dibromochloromethane	7.53	129	161933	24.41	ug/L		98
53) C163	1,2-Dibromoethane	7.62	107	234204	25.59	ug/L		98
54) C215	2-Hexanone	7.36	43	1947678	130.79	ug/L		99
55) C235	Chlorobenzene	7.98	112	623375	24.56	ug/L		99
56) C281	1,1,1,2-Tetrachloroe	8.05	131	208047	21.39	ug/L		98
57) C240	Ethylbenzene	8.04	91	1144055	24.85	ug/L		98
58) C246	m,p-Xylene	8.13	106	892184	50.26	ug/L		97
59) C247	o-Xylene	8.46	106	449208	25.49	ug/L		99
60) C245	Styrene	8.48	104	666207	25.09	ug/L		98
63) C180	Bromoform	8.68	173	91618	25.70	ug/L		97
64) C966	Isopropylbenzene	8.75	105	1113307	25.26	ug/L		99
65) C301	Bromobenzene	9.05	156	264115	24.53	ug/L		96
66) C225	1,1,2,2-Tetrachloroe	9.03	83	359139	25.84	ug/L		100
67) C282	1,2,3-Trichloropropa	9.08	110	112490	24.55	ug/L		100
68) C283	t-1,4-Dichloro-2-But	9.07	53	392515	108.74	ug/L		88
69) C302	n-Propylbenzene	9.08	91	1436481	25.36	ug/L		100
70) C303	2-Chlorotoluene	9.19	126	261729	25.14	ug/L		100
71) C289	4-Chlorotoluene	9.28	126	257477	24.64	ug/L		100
72) C304	1,3,5-Trimethylbenze	9.22	105	993797	25.31	ug/L		97
73) C306	tert-Butylbenzene	9.50	134	184778	25.57	ug/L		100
74) C307	1,2,4-Trimethylbenze	9.55	105	1010165	25.13	ug/L		99
75) C308	sec-Butylbenzene	9.68	105	1265287	25.75	ug/L		99
76) C260	1,3-Dichlorobenzene	9.82	146	508107	24.01	ug/L		97
77) C309	4-Isopropyltoluene	9.79	119	1002019	25.68	ug/L		99
78) C267	1,4-Dichlorobenzene	9.89	146	515278	23.94	ug/L		97
79) C249	1,2-Dichlorobenzene	10.22	146	507745	24.45	ug/L		97
80) C310	n-Butylbenzene	10.15	91	1012644	25.42	ug/L		99
81) C286	1,2-Dibromo-3-Chloro	10.90	75	54349	18.82	ug/L		96
82) C313	1,2,4-Trichlorobenze	11.58	180	357899	24.98	ug/L		98
83) C316	Hexachlorobutadiene	11.69	225	184248	26.27	ug/L		97
84) C314	Naphthalene	11.79	128	1085840	25.59	ug/L		100
85) C934	1,2,3-Trichlorobenze	11.99	180	343339	25.19	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

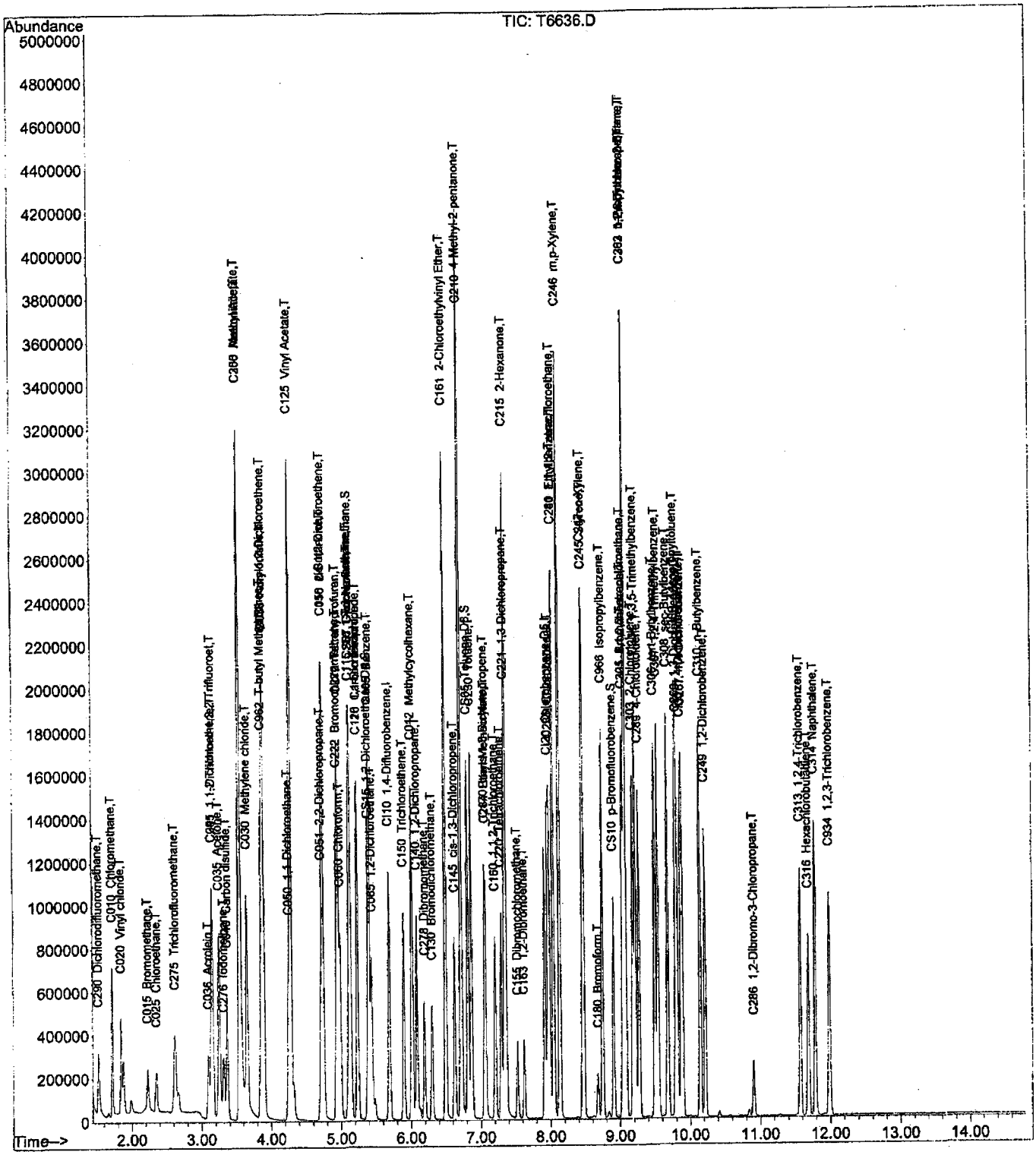
12/30/09

Quantitation Report (Not Reviewed)

Data File : H:\GCMS_VOA\T\120309\T6636.D
Acq On : 3 Dec 2009 13:15
Sample : 9L03027-BS1
Misc :
MS Integration Params: RTEINT.P

Vial: 38
Operator: LH
Inst : 5975 T
Multiplr: 1.00

Quant Time: Dec 03 14:56:18 2009 Results File: R9L0204-6PT.RES
Quant Method : C:\MSDCHEM\1...\R9L0204-6PT.M (RTE Integrator)
Title : 8260 5ML
Last Update : Thu Dec 03 15:01:03 2009
Response via : Initial Calibration
DataAcq Meth : VOA.M



HOLDING TIME SUMMARY

8260B

Laboratory: TestAmerica Buffalo SDG: DRAFT

Client: ARCADIS U.S., Inc. - Albany, NY Project: Arcadis, Geraghty & Miller - NY9A8463

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
DUP-113009	11/30/09 00:00	12/02/09 10:30	12/03/09 11:54	3	14	12/03/09 16:00	3	14	
PZ-17	11/30/09 18:11	12/02/09 10:30	12/03/09 11:54	3	14	12/03/09 16:24	3	14	
PZ-18	11/30/09 16:53	12/02/09 10:30	12/03/09 11:54	3	14	12/03/09 16:48	3	14	
PZ-19	11/30/09 18:31	12/02/09 10:30	12/03/09 11:54	3	14	12/03/09 17:12	3	14	
PZ-20	11/30/09 17:36	12/02/09 10:30	12/03/09 11:54	3	14	12/03/09 17:36	3	14	
TRIP BLANK	11/30/09 00:00	12/02/09 10:30	12/03/09 11:54	3	14	12/03/09 18:00	3	14	

* Indicates a Holding Time violation.

PREPARATION BENCH SHEET

9L03027

TestAmerica Buffalo

nted: 12/30/2009 10:21:40AM

Matrix: Water **Prepared using: GCMS Volatiles - 5030B MS** **Surrogate used: 9111324**

Lab Number	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	Bar Code	Extraction Comments
9L03027-BLK1	QC	12/03/09 11:54	5	5				1		
9L03027-BS1	QC	12/03/09 11:54	5	5	9120112		5000	1		
RSK1096-04	8260 TCLP	12/03/09 11:54	5	5				100		A00039,
RSK1175-01	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-02	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-03	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-04	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-07	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-08	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-09	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-10	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSK1175-11	8260	12/03/09 11:54	5	5				1		A00175,NI01
RSL0187-01	8260 TCL4.3	12/03/09 11:54	5	5				1		A00039,
RSL0187-02	8260 TCL4.3	12/03/09 11:54	5	5				1		A00039,
RSL0187-03	8260 TCL4.3	12/03/09 11:54	5	5				1		A00039,
RSL0187-04	8260 TCL4.3	12/03/09 11:54	5	5				1		A00039,
RSL0187-05	8260 TCL4.3	12/03/09 11:54	5	5				1		A00039,
RSL0187-06	8260 TCL4.3	12/03/09 11:54	5	5				1		A00039,

Spiking Witnessed By Date

Preparation Reviewed By Date

Extracts Received By Date

GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-9

TWS 12/2/09

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
12/2/09	2355	~~LAA~~	T6616	RL90211-TUN1	〃	5mL	〃	〃
12/3/09	—	TWS	T6617	-CAL1				
	0041		T6618	-CAL1				
	0105		T6619	-CAL2				
	0129		T6620	-CAL3				
	0153		T6621	-CAL4				
	0217		T6622	-CAL5				
	0241		T6623	-CAL6				
	—		T6624	1BLK				
	—		T6625	-CAL7				
	0353		T6626	-CAL7				
	0417		T6627	-CAL8				
	0441		T6628	-CAL9				
	0505		T6629	-CALA				
	0529		T6630	-CALB				
	0553		T6631	-CALC				
	—		T6632	1BLK				
	0641	↓	T6633	-SCV1	↓	↓	↓	↓
12/3/09	1219	MA	T6634	R190313-TUN1	〃	5mL	〃	〃
	1241		T6635	-CCV1				
	1315		T6636	9L03027-BS1				
	1354		T6637	-BLK1	⊥			⊥
	1425		T6638	RSK1096-01REI	K1096			10
	1448		T6639	-02REI				10
	1512		T6640	-03REI				10
	1536		T6641	-04	⊥			1
	1600		T6642	RSL0187-01	L0187			1
	1624		T6643	-02(E)				5
	1648		T6644	-03				1
	1712		T6645	-04				1
	1736		T6646	-05				1
	1800		T6647	-06	⊥			1
	1824		T6648	RSK1175-01	K1175			1
	1848		T6649	-02				1
	1913		T6650	-03				1
	1937		T6651	-04				1
	2000		T6652	-05				1
	2024	⊥	T6653	-06	⊥	⊥	⊥	1

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-09

STD #	IS/SS MIX #	ReRun?	pH <2	Comments
9110192	9111322	—	—	PASS
9120146	1323	—	—	
⊥		—	—	
9120147		—	—	8260
9120148		—	—	(RSL0204)
9120149		—	—	
9120150		—	—	
9120151		—	—	
—		—	—	
9120191		—	—	
↓		—	—	
9120192		—	—	8260-ADD
9120193		—	—	(RSL0204-ADD)
9120194		—	—	
9120195		—	—	
9120196		—	—	
—		—	—	
9120197	↓	—	—	OR
9110192	9111322	—	—	PASS
9120111	1323	—	—	8260 (RSL0204)
9120112			—	
〃	〃		—	
〃	〃	Y	X	RE@20X
〃	〃	Y	X	RE@20X
〃	〃	Y	X	RE@20X
〃	〃		7	
〃	〃		X	
〃	〃		X	
〃	〃		X	
〃	〃		X	
〃	〃		X	
〃	〃		X	
〃	〃		X	
〃	〃		X	
〃	〃		X	
〃	〃	Y	X	RE@10X
〃	〃	Y	X	RE@20X SOIL OUT
〃	〃	Y	X	RE@2X C.O.
⊥	⊥			

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-9

Date	Time	Analyst	File #	Sample ID	Job#	Inj. Vol.	Ext. Wt.	D.F.
12/3/09	2048	LH	T6654	RSK175-07	K175	5mL	7	1
	2112		T6655	-08				1
	2136		T6656	-09				1
	2200		T6657	-10				1
	2223		T6658	-11				1
	2247		T6659	ALQ3027-MS1	K096			10
	2311		T6660	-MSD1				10
		TWS	T6661	IBLK	—	5mL	7	—
			T6662	IBLK	—			—
			T6663	RSK100S-01	K100S			1
			T6664	-02				1
			T6665	-03				1
			T6666	-04				1
			T6667	-05				1
			T6668	-06				1
			T6669	-07				1
			T6670	-08				1

NOT RUN TWS 12/4/09

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GC/MS VOLATILE INJECTION LOG

Logbook # A09-06-09

STD #	IS/SS MIX #	ReRun?	pH <2	Comments
	9111322	Y	X	REC 4X
	1323	Y	X	REC 20X
			X	
			X	
			X	
9120112			/	NOT USED. BASE N, G
	9111322			NOT RUN NO ADD TWS 12/4/09
	9111323			VHB'S

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ARCADIS

Appendix C

ARCADIS
Infrastructure, environment, buildings

Imagine the result

Lockheed Martin Corporation-
Utica, NY Site

Data Usability Summary Report

UTICA, NEW YORK

Volatile Analyses

SDG# RSL0187

Analyses Performed By:
TestAmerica Laboratories
Buffalo, New York

Report: # 11318R
Review Level: Tier III
Project: NJ001001.0001.0001

SUMMARY

The following is an assessment of the data package for Sample Delivery Group (SDG) RSL0187 for sampling from the Lockheed Martin Corporation Utica, East Parking Site. Included with this assessment are the corrected sample results, sample compliance report, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
DUP113009	RSL0187-1	Water	11/30/09	PZ-18	X				
PZ-17	RSL0187-2	Water	11/30/09		X				
PZ-18	RSL0187-3	Water	11/30/09		X				
PZ-19	RSL0187-4	Water	11/30/09		X				
PZ-20	RSL0187-5	Water	11/30/09		X				
Trip Blank	RSL0187-6	Water	11/30/09		X				

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency USEPA SW-846 Method 8260B (selected compound list reported). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and January 2005.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cooled @ 4 °C; preserved to a pH of less than 2 s.u.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Result
All sample locations within this SDG	CCV %D	Bromomethane	-40.8%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketenes, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on sample location within this data package.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
All sample locations within SDG	Bromodichloromethane	< (LL) but > 10%

The criteria used to evaluate the LCS/LCSD recoveries are presented in the following table. In the case of an LCS/LCSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	J
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
PZ-18/DUP113009	cis-1,2-Dichloroethene	0.82 J	0.68 J	AC
	Trans-1,2-Dichloroethene	0.83 J	0.74 J	AC
	Acetone	2.2 J	ND(5.0)	AC

AC Acceptable
NC Not compliant
ND Not detected

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All compounds in the original analysis of sample PZ-17 required reanalysis at a higher dilution due to excessive foaming per laboratory case narrative.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs; OLM04.2	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)					X
Matrix Spike Duplicate(MSD)					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (%D)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier IV Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs; OLM04.2	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Percent relative difference
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB/PEST /HERB	MET	MISC	
RSL0187	11/30/09	SW-846 8260B	DUP113009	Water	No	--	--	--	--	VOC- % Recovery LCS, CCV%D
RSL0187	11/30/09	SW-846 8260B	PZ-17	Water	No	--	--	--	--	VOC- % Recovery LCS, CCV%D
RSL0187	11/30/09	SW-846 8260B	PZ-18	Water	No	--	--	--	--	VOC- % Recovery LCS, CCV%D
RSL0187	11/30/09	SW-846 8260B	PZ-19	Water	No	--	--	--	--	VOC- % Recovery LCS, CCV%D
RSL0187	11/30/09	SW-846 8260B	PZ-20	Water	No	--	--	--	--	VOC- % Recovery LCS, CCV%D
RSL0187	11/30/09	SW-846 8260B	Trip Blank	Water	No	--	--	--	--	VOC- % Recovery LCS, CCV%D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY:	Mary Ann Doyle
SIGNATURE:	
DATE:	January 4, 2009
VALIDATION PEER REVIEW BY:	Dennis Capria
DATE:	January 7, 2010

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

11318R

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-01 (DUP-113009 - Water)						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Bromodichloromethane	ND J		1.0	0.39	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Bromomethane	ND J		1.0	0.28	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
cis-1,2-Dichloroethene	0.68	J	1.0	0.38	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
trans-1,2-Dichloroethene	0.74	J	1.0	0.42	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-01 (DUP-113009 - Water) - cont.						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 16:00	LH	9L03027	8260B
1,2-Dichloroethane-d4	*99 %*		*Surr Limits: (66-137%)*				*12/03/09 16:00*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*97 %*		*Surr Limits: (73-120%)*				*12/03/09 16:00*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*		*Surr Limits: (71-126%)*				*12/03/09 16:00*	*LH*	*9L03027*	*8260B*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-02 (PZ-17 - Water)						**Sampled: 11/30/09 18:11**		**Recvd: 12/02/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D03	5.0	1.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND	D03	5.0	1.1	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1,2-Trichloroethane	ND	D03	5.0	1.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	D03	5.0	1.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1-Dichloroethane	ND	D03	5.0	1.9	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,1-Dichloroethene	ND	D03	5.0	1.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dibromoethane	ND	D03	5.0	0.83	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichlorobenzene	ND	D03	5.0	1.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichloroethane	ND	D03	5.0	1.1	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichloropropane	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,3-Dichlorobenzene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,4-Dichlorobenzene	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
2-Butanone	ND	D03	25	6.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
2-Hexanone	ND	D03	25	6.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
4-Methyl-2-pentanone	ND	D03	25	4.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Acetone	ND	D03	25	6.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Benzene	ND	D03	5.0	2.0	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Bromodichloromethane	ND	D03	5.0	1.9	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Bromoform	ND	D03	5.0	1.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Bromomethane	ND	D03	5.0	1.4	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Carbon disulfide	ND	D03	5.0	0.97	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Carbon Tetrachloride	ND	D03	5.0	1.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chlorobenzene	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Dibromochloromethane	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chloroethane	ND	D03	5.0	1.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chloroform	ND	D03	5.0	1.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Chloromethane	ND	D03	5.0	1.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND	D03	5.0	1.9	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Cyclohexane	ND	D03	5.0	2.7	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Dichlorodifluoromethane	ND	D03	5.0	1.4	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Ethylbenzene	ND	D03	5.0	0.92	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Isopropylbenzene	ND	D03	5.0	0.96	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methyl Acetate	ND	D03	5.0	2.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND	D03	5.0	0.80	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methylcyclohexane	ND	D03	5.0	2.5	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Methylene Chloride	ND	D03	5.0	2.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Styrene	ND	D03	5.0	0.92	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Tetrachloroethene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Toluene	ND	D03	5.0	2.6	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND	D03	5.0	2.1	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND	D03	5.0	1.8	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Trichloroethene	ND	D03	5.0	2.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Trichlorofluoromethane	ND	D03	5.0	0.76	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
Vinyl chloride	ND	D03	5.0	1.2	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
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Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-02 (PZ-17 - Water) - cont.						**Sampled: 11/30/09 18:11**		**Recvd: 12/02/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND	D03	10	3.3	ug/L	5.00	12/03/09 16:24	LH	9L03027	8260B
1,2-Dichloroethane-d4	*100 %*	*D03*	*Surr Limits:*	*(66-137%)*			*12/03/09 16:24*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*95 %*	*D03*	*Surr Limits:*	*(73-120%)*			*12/03/09 16:24*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*	*D03*	*Surr Limits:*	*(71-126%)*			*12/03/09 16:24*	*LH*	*9L03027*	*8260B*

TestAmerica
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465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

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Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-03 (PZ-18 - Water)							**Sampled: 11/30/09 16:53**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Acetone	2.2	J	5.0	1.3	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Bromodichloromethane	ND J		1.0	0.39	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Bromomethane	ND J		1.0	0.28	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
cis-1,2-Dichloroethene	0.82	J	1.0	0.38	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
trans-1,2-Dichloroethene	0.83	J	1.0	0.42	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-03 (PZ-18 - Water) - cont.							**Sampled: 11/30/09 16:53**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 16:48	LH	9L03027	8260B
1,2-Dichloroethane-d4	*100 %*		*Surr Limits: (66-137%)*				*12/03/09 16:48*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*96 %*		*Surr Limits: (73-120%)*				*12/03/09 16:48*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*		*Surr Limits: (71-126%)*				*12/03/09 16:48*	*LH*	*9L03027*	*8260B*

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ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

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Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-04 (PZ-19 - Water)							**Sampled: 11/30/09 18:31**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Acetone	3.7	J	5.0	1.3	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Bromodichloromethane	ND J		1.0	0.39	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Bromomethane	ND J		1.0	0.28	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Tetrachloroethene	0.59	J	1.0	0.36	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-04 (PZ-19 - Water) - cont.							**Sampled: 11/30/09 18:31**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 17:12	LH	9L03027	8260B
1,2-Dichloroethane-d4	*100 %*		*Surr Limits: (66-137%)*				*12/03/09 17:12*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*95 %*		*Surr Limits: (73-120%)*				*12/03/09 17:12*	*LH*	*9L03027*	*8260B*
Toluene-d8	*98 %*		*Surr Limits: (71-126%)*				*12/03/09 17:12*	*LH*	*9L03027*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-05 (PZ-20 - Water)						**Sampled: 11/30/09 17:36**		**Recvd: 12/02/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Bromodichloromethane	ND	J	1.0	0.39	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Bromomethane	ND	J	1.0	0.28	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-05 (PZ-20 - Water) - cont.							**Sampled: 11/30/09 17:36**		**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 17:36	LH	9L03027	8260B
1,2-Dichloroethane-d4	*99 %*		*Surr Limits: (66-137%)*				*12/03/09 17:36*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*95 %*		*Surr Limits: (73-120%)*				*12/03/09 17:36*	*LH*	*9L03027*	*8260B*
Toluene-d8	*95 %*		*Surr Limits: (71-126%)*				*12/03/09 17:36*	*LH*	*9L03027*	*8260B*

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ARCADIS U.S., Inc. - Albany, NY
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Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-06 (TRIP BLANK - Water)						Sampled: 11/30/09			Recvd: 12/02/09 10:30	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dibromoethane	ND		1.0	0.17	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
2-Butanone	ND		5.0	1.3	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
4-Methyl-2-pentanone	ND		5.0	0.91	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Dibromochloromethane	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methyl-t-Butyl Ether (MTBE)	ND		1.0	0.16	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSL0187

Project: LMC - Utica, NY
Project Number: AGM

Received: 12/02/09
Reported: 12/04/09 15:06

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSL0187-06 (TRIP BLANK - Water) - cont.						**Sampled: 11/30/09**			**Recvd: 12/02/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Xylenes, total	ND		2.0	0.66	ug/L	1.00	12/03/09 18:00	LH	9L03027	8260B
1,2-Dichloroethane-d4	*99 %*		*Surr Limits: (66-137%)*				*12/03/09 18:00*	*LH*	*9L03027*	*8260B*
4-Bromofluorobenzene	*96 %*		*Surr Limits: (73-120%)*				*12/03/09 18:00*	*LH*	*9L03027*	*8260B*
Toluene-d8	*97 %*		*Surr Limits: (71-126%)*				*12/03/09 18:00*	*LH*	*9L03027*	*8260B*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client: LMC / Arcadis	Project Manager: J. Bonsteel	Date: 12/1/09	Chain of Custody Number: 395786
Address: French Road	Telephone Number (Area Code)/Fax Number: 518-452-7826	Lab Number: NY9A8463	Page 1 of 1
City: Utica / State: NY / Zip Code: 13410	Site Contact: Dan Zuck	Lab Contact: C.L. Fox	
Project Name and Location (State): LMC Utica, NY	Carrier/Waybill Number: UPS		
Contract/Purchase Order/Quote No: NJ000637.0001.00002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Solid	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): TCL VOCs 8260	Special Instructions/ Conditions of Receipt
DUP-113009	11/30/09	—		X						2			X	
PZ-17		1811		X						2			X	
PZ-18		1653		X						2			X	
PZ-19		1831		X						2			X	
PZ-20		1736		X						2			X	
Trip Blank		—		X						2			X	

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other 5 Days

QC Requirements (Specify)

1 Relinquished By: Daniel Zuck	Date: 11/30/09	Time: 1730	1 Received By: [illegible]	Date: 12-2-09	Time: 1050
2 Relinquished By	Date	Time	2 Received By	Date	Time
3 Relinquished By: Daniel Zuck	Date: 12/1/09	Time: 1730	3 Received By	Date	Time

Comments: Please Report Results to Jeff Bonsteel

2.0°

DISTRIBUTION: WHITE - Returned to Client with Report, CANARY - Stays with the Sample, PINK - Field Copy

ARCADIS
Infrastructure, environment, facilities

Lockheed Martin Corporation-
Utica, NY Site

Data Usability Summary Report

UTICA, NEW YORK

Volatile Analyses

SDG#C0912007

Analyses Performed By:
Centek Laboratories, LLC
Syracuse, New York

Report: #11319R
Review Level: Tier III
Project: NJ001001.0001.00001

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #C0912007 for samples collected in association with the Lockheed Martin Utica East Parking Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
AMB120109	C0912007-001A	AIR	12/1/2009		X				
SG-3	C0912007-002A	AIR	12/1/2009		X				
SG-4	C0912007-003A	AIR	12/1/2009		X				

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15 and ASTM D1946. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOP HW-31 Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 of October 2006, New York State DEC Analytical Method ASP 2005 TO-15 (QA/QC Criteria R9 TO-15) and NYSDEC Modifications to R9 TO-15 QA/QC Criteria February 2008.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Method TO-15	Air	30 days storage from collection to analysis	Ambient temperature

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL.

3. Mass Spectrometer Tuning

Mass spectrometer performance and column resolution was acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibited recoveries with control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%. The relative percent difference (RPD) between the LCS/LCSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

Sample Locations	Compound	LCS Recovery	LCSD Recovery
AMB120109 SG-3 SG-4	Hexachloro-1,3-butadiene	>UL	>UL
	1,2,4-Trichlorobenzene	AC	>UL
	1,2-Dichlorobenzene	AC	>UL
	1,3-Dichlorobenzene	AC	>UL
	1,4-Dichlorobenzene	AC	>UL

The criteria used to evaluate the LCS recoveries are presented in the following table.
In the case of an LCS deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
LCS percent recovery >130%	Non-detect	No Action
	Detect	J
LCS percent recovery <70% but > 10%	Non-detect	J
	Detect	J
< 10%	Non-detect	R
	Detect	J

Note: Sample results were not qualified as rejected (R) due to the deviations listed above.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits; however, sample locations associated with LCS/LCSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
AMB120109 SG-3 SG-4	Freon 113

The criteria used to evaluate the RPD between the LCS/LCSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	J
	Detect	J

8. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Laboratory duplicates were not performed as part of this SDG.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A field duplicate was not collected at this sample location.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure/vacuum (5"Hg ± 1)		X		X	
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks					X
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)		X	X		
LCS/LCSD Precision (RPD)		X	X		
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					

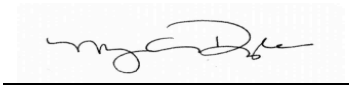
%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
C0912007	12/1/2009	TO-15	AMB120109	Air	No	--	--	--	--	VOC –LCS/LCSD %Recovery, LCS/LCSD RPD
C091200	12/1/2009	TO-15	SG-3	Air	No	--	--	--	--	VOC –LCS/LCSD %Recovery, LCS/LCSD RPD
C0912007	12/1/2009	TO-15	SG-4	Air	No	--	--	--	--	VOC –LCS/LCSD %Recovery, LCS/LCSD RPD

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Mary Ann Doyle

SIGNATURE: 

DATE: January 4 , 2010

PEER REVIEW BY: Dennis Capria

DATE: January 7, 2010

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

1131R

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab's Vacuum Reading	-18			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.24	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	< 0.15	0.15		ppbV	1	12/4/2009
Acetone	3.7	0.30		ppbV	1	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	0.20	0.15		ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	< 0.15	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	0.30	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	0.84	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.21	0.15		ppbV	1	12/4/2009
Freon 113	< 0.15 J	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.41	0.15		ppbV	1	12/4/2009
Heptane	0.15	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	< 0.15	0.15		ppbV	1	12/4/2009
Isopropyl alcohol	1.5	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.21	0.30	J	ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	0.15	0.30	J	ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	0.43	0.15		ppbV	1	12/4/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.21	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.38	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	1.6	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	94.0	70-130		%REC	1	12/4/2009

Qualifiers:					
	**	Reporting Limit	.	Results reported are not blank corrected	
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits	
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit	
	S	Spike Recovery outside accepted recovery limits			

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	1.2	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	< 0.75	0.75		ug/m3	1	12/4/2009
Acetone	9.0	0.72		ug/m3	1	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	0.65	0.49		ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	< 0.47	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	0.63	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	3.4	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/4/2009
Freon 11	1.2	0.86		ug/m3	1	12/4/2009
Freon 113	< 1.2	1.2	J	ug/m3	1	12/4/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-120109
Lab Order:	C0912007	**Tag Number:**	274,345
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	0.62	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	< 0.54	0.54		ug/m3	1	12/4/2009
Isopropyl alcohol	3.7	0.37		ug/m3	1	12/4/2009
m&p-Xylene	0.93	1.3	J	ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	0.45	0.90	J	ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	1.5	0.53		ug/m3	1	12/4/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	1.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	1.5	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	8.6	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab's Vacuum Reading	-4			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		TO-15				Analyst: **RJP**
1,1,1-Trichloroethane	3.6	1.5		ppbV	10	12/4/2009
1,1,1-Trichloroethane	3.4	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.60	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	0.13	0.15	J	ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	0.24	0.15		ppbV	1	12/4/2009
Acetone	6.7	3.0		ppbV	10	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	0.12	0.15	J	ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	0.55	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.22	0.15		ppbV	1	12/4/2009
Freon 11	0.17	0.15		ppbV	1	12/4/2009
Freon 113	0.20 J	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.42	0.15		ppbV	1	12/4/2009
Heptane	0.18	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	0.14	0.15	J	ppbV	1	12/4/2009
Isopropyl alcohol	0.52	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.70	0.30		ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	0.17	0.30	J	ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	< 0.15	0.15		ppbV	1	12/4/2009
o-Xylene	0.22	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.78	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.58	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	0.39	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: **RJP**
1,1,1-Trichloroethane	20	8.3		ug/m3	10	12/4/2009
1,1,1-Trichloroethane	19	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	3.0	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	0.65	0.75	J	ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	1.2	0.75		ug/m3	1	12/4/2009
Acetone	16	7.2		ug/m3	10	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	0.39	0.49	J	ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	1.7	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	< 0.31	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	0.97	0.66		ug/m3	1	12/4/2009
Freon 11	0.97	0.86		ug/m3	1	12/4/2009
Freon 113	1.6 J	1.2		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-3
Lab Order:	C0912007	**Tag Number:**	549,343
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		TO-15				Analyst: RJP
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	0.75	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	0.50	0.54	J	ug/m3	1	12/4/2009
Isopropyl alcohol	1.3	0.37		ug/m3	1	12/4/2009
m&p-Xylene	3.1	1.3		ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	0.51	0.90	J	ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	< 0.53	0.53		ug/m3	1	12/4/2009
o-Xylene	0.97	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	5.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	2.2	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	2.1	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:					
	**	Reporting Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		FLD				Analyst:
Lab's Vacuum Reading	-6			"Hg		12/3/2009
1UG/M3 BY METHOD TO15		TO-15				Analyst: **RJP**
1,1,1-Trichloroethane	0.15	0.15		ppbV	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2,4-Trimethylbenzene	0.38	0.15		ppbV	1	12/4/2009
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	12/4/2009
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
1,4-Dioxane	< 0.30	0.30		ppbV	1	12/4/2009
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	12/4/2009
4-ethyltoluene	0.12	0.15	J	ppbV	1	12/4/2009
Acetone	8.4	3.0		ppbV	10	12/4/2009
Allyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Benzene	< 0.15	0.15		ppbV	1	12/4/2009
Benzyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Bromodichloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Bromoform	< 0.15	0.15		ppbV	1	12/4/2009
Bromomethane	< 0.15	0.15		ppbV	1	12/4/2009
Carbon disulfide	0.21	0.15		ppbV	1	12/4/2009
Carbon tetrachloride	< 0.15	0.15		ppbV	1	12/4/2009
Chlorobenzene	< 0.15	0.15		ppbV	1	12/4/2009
Chloroethane	< 0.15	0.15		ppbV	1	12/4/2009
Chloroform	< 0.15	0.15		ppbV	1	12/4/2009
Chloromethane	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Cyclohexane	< 0.15	0.15		ppbV	1	12/4/2009
Dibromochloromethane	< 0.15	0.15		ppbV	1	12/4/2009
Ethyl acetate	< 0.25	0.25		ppbV	1	12/4/2009
Ethylbenzene	< 0.15	0.15		ppbV	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 11	0.15	0.15		ppbV	1	12/4/2009
Freon 113	1.2 J	0.15		ppbV	1	12/4/2009
Freon 114	< 0.15	0.15		ppbV	1	12/4/2009
Freon 12	0.42	0.15		ppbV	1	12/4/2009
Heptane	< 0.15	0.15		ppbV	1	12/4/2009
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	12/4/2009
Hexane	< 0.15	0.15		ppbV	1	12/4/2009
Isopropyl alcohol	2.0	0.15		ppbV	1	12/4/2009
m&p-Xylene	0.25	0.30	J	ppbV	1	12/4/2009
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Ethyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	12/4/2009
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	12/4/2009
Methylene chloride	0.47	0.15		ppbV	1	12/4/2009
o-Xylene	< 0.15	0.15		ppbV	1	12/4/2009
Propylene	< 0.15	0.15		ppbV	1	12/4/2009
Styrene	< 0.15	0.15		ppbV	1	12/4/2009
Tetrachloroethylene	0.21	0.15		ppbV	1	12/4/2009
Tetrahydrofuran	< 0.15	0.15		ppbV	1	12/4/2009
Toluene	0.22	0.15		ppbV	1	12/4/2009
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	12/4/2009
Trichloroethene	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl acetate	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl Bromide	< 0.15	0.15		ppbV	1	12/4/2009
Vinyl chloride	< 0.15	0.15		ppbV	1	12/4/2009
Surr: Bromofluorobenzene	87.0	70-130		%REC	1	12/4/2009

Qualifiers:					
	**	Reporting Limit	.	Results reported are not blank corrected
	B	Analyte detected in the associated Method Blank	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
	JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.83	0.83		ug/m3	1	12/4/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/4/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/4/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/4/2009
1,2,4-Trimethylbenzene	1.9	0.75		ug/m3	1	12/4/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/4/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/4/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/4/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/4/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/4/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/4/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/4/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/4/2009
4-ethyltoluene	0.60	0.75	J	ug/m3	1	12/4/2009
Acetone	20	7.2		ug/m3	10	12/4/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/4/2009
Benzene	< 0.49	0.49		ug/m3	1	12/4/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/4/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/4/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/4/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/4/2009
Carbon disulfide	0.66	0.47		ug/m3	1	12/4/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/4/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/4/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/4/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/4/2009
Chloromethane	< 0.31	0.31		ug/m3	1	12/4/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/4/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/4/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/4/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/4/2009
Freon 11	0.86	0.86		ug/m3	1	12/4/2009
Freon 113	9.5	1.2		ug/m3	1	12/4/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
.	Results reported are not blank corrected
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *16-Dec-09*

CLIENT:	Arcadis	**Client Sample ID:**	SG-4
Lab Order:	C0912007	**Tag Number:**	314,68
Project:	LMC Utica	**Collection Date:**	12/1/2009
Lab ID:	C0912007-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.1	0.75		ug/m3	1	12/4/2009
Heptane	< 0.62	0.62		ug/m3	1	12/4/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/4/2009
Hexane	< 0.54	0.54		ug/m3	1	12/4/2009
Isopropyl alcohol	4.9	0.37		ug/m3	1	12/4/2009
m&p-Xylene	1.1	1.3	J	ug/m3	1	12/4/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/4/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/4/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/4/2009
Methylene chloride	1.7	0.53		ug/m3	1	12/4/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/4/2009
Propylene	< 0.26	0.26		ug/m3	1	12/4/2009
Styrene	< 0.65	0.65		ug/m3	1	12/4/2009
Tetrachloroethylene	1.4	1.0		ug/m3	1	12/4/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/4/2009
Toluene	0.84	0.57		ug/m3	1	12/4/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/4/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/4/2009
Trichloroethene	< 0.82	0.82		ug/m3	1	12/4/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/4/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/4/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/4/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC
143 Midler Park Drive
Syracuse, NY 13206
Phone: 315-431-9730 Fax: 315-431-9731 Emergency: 315-416-2751 / 416-2752

Chain of Custody

Site Name: LMC Utica
Project:
PO#: NJ000637.0001.00002
Other:

Detection Limit	Report Level
☐ 5ppbv	☐ Level I
☐ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE .25	☐ Cat "B" Like

Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	12/7/09
4 Business Days	☐	35%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
Next Day by 5pm	☐	100%	
Next Day by Noon	☐	150%	
Same Day	☐	200%	

Company: Arcadis
Report: Jeff Bonsteel
465 New Karner Rd. First Floor
Albany, NY 12205
Phone: 518-452-7826
Fax: 518-452-7086
Email: JBonsteel@Arcadis-US.com

Company: Arcadis
Invoice: SAME
Phone:
Fax:
Email:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Comments	Vacuum Start/Stop
AMB-120109	12/1/09	774	345	TO-15		-29 / -18
SG-3	12/1/09	549	343	TO-15		-28.5 / -5
SG-4	12/1/09	314	68	TO-15		-31 / -5.5

COC 1 2007

Chain of Custody	Print Name	Signature	Date/Time	Courier:
Sampled by:	Daniel Zuck		12/1/09	1648
Relinquished by:	Daniel Zuck		12/2/09	1518
Received at Lab by:	Jeff Scala		12-2-09	15:18

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Page 1 of 1

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Lockheed Martin Corporation-
Utica, NY Site

Data Usability Summary Report

UTICA, NEW YORK

Volatile Analyses

SDG# RSK0991

Analyses Performed By:
TestAmerica Laboratories
Buffalo, New York

Report: # 11390R
Review Level: Tier III
Project: NJ001001.0001.0001

SUMMARY

The following is an assessment of the data package for Sample Delivery Group (SDG) RSK0991 for sampling from the Lockheed Martin Corporation Utica, East Parking Site. Included with this assessment are the corrected sample results, sample compliance report, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
GW-1	RSK0991-01	Water	11/16/09		X				
GW-2	RSK0991-02	Water	11/17/09		X				
GW-3	RSK0991-03	Water	11/17/09		X				
GW-4	RSK0991-04	Water	11/17/09		X				
GW-6	RSK0991-05	Water	11/18/09		X				
GW-5	RSK0991-06	Water	11/19/09		X				
GW-6 (11-12)	RSK0991-07	Soil	11/18/09		X				
TRIP BLANK	RSK0991-08	Water	11/19/09		X				

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X	X		
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency USEPA SW-846 Method 8260B (selected compound list reported). Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999 and January 2005.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis	Cooled @ 4 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cooled @ 4 °C.

The analyses that exceeded the holding are presented in the following table.

Sample Locations	Holding Time	Criteria
GW-1	Unpreserved hold time criteria 7 days	8 days

Sample results associated with sample locations analyzed by analytical method SW-846 8260 were qualified, as specified in the table below. All other holding times were met.

Criteria	Qualification	
	Detected Analytes	Non-detect Analytes
Analysis completed less than two times holding time	J	UJ

Note: Sample location GW-1 was collected and received at pH>2. The sample was analyzed beyond the unpreserved hold time criteria of7 days. Therefore the sample was qualified as estimated as outlined in the table above.

Sample locations: GW-2, GW-3, and GW-4 were collected and received at pH>2. The samples were analyzed within 7 days therefore no qualification of the data was necessary based on this deviation.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Result
GW-1 GW-3 GW-6 GW-5	CCV %D	Bromoform	-29.5%
GW-6 (11-12)	CCV %D	1, 3-Dichlorobenzene	-20.4
		Acetone	22.5%
		Bromoform	-24.0%
		Carbon Disulfide	36.5%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J

Initial/Continuing	Criteria	Sample Result	Qualification
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 15% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketenes, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

A MS/MSD was not performed on sample location within this data package.

8. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate was not collected as part of this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample ID	Compound	Original Analysis	Diluted Analysis	Reported Analysis
GW-1	1,2-Dichloroethene	340 E	320 D	320 D
	Cis-1,2-Dichloroethene	340 E	320 D	320 D
GW-3	Chloroethane	180 E	170 D	170 D
GW-6	Tetrachloroethene	500 E	620 D	620 D
GW-5	1,1-Dichloroethane	440 E	450 D	450 D
	Chloroethane	120 E	130 D	130 D
GW-6 (11-12)	Tetrachloroethene	170000 E	290000 D	290000 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ
Original sample result greater than the calibration range	EJ

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs; OLM04.2	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X	X		
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS)					X
Matrix Spike Duplicate(MSD)					X
MS/MSD Precision (RPD)					X
Field/Lab Duplicate (%D)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier IV Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

VOCs; OLM04.2	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Percent relative difference
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SAMPLE COMPLIANCE REPORT

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB/PEST /HERB	MET	MISC	
RSK0991	11/16/09	SW-846 8260B	GW-1	Water	No	--	--	--	--	VOC- Holding time, CCV%D, Dilutions
RSK0991	11/17/09	SW-846 8260B	GW-2	Water	No	--	--	--	--	VOC- CCV%D
RSK0991	11/17/09	SW-846 8260B	GW-3	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
RSK0991	11/17/09	SW-846 8260B	GW-4	Water	No	--	--	--	--	VOC- CCV%D
RSK0991	11/18/09	SW-846 8260B	GW-6	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
RSK0991	11/19/09	SW-846 8260B	GW-5	Water	No	--	--	--	--	VOC- CCV%D, Dilutions
RSK0991	11/18/09	SW-846 8260B	GW-6 (11-12)	Soil	No	--	--	--	--	VOC- CCV%D, Dilutions
RSK0991	11/19/09	SW-846 8260B	TRIP BLANK	Water	No	--	--	--	--	VOC- CCV%D

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY:	Mary Ann Doyle
SIGNATURE:	
DATE:	January 14, 2009
VALIDATION PEER REVIEW BY:	Dennis Capria
DATE:	January 14, 2010

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

11390R

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Sample ID: RSK0991-01 (GW-1 - Water) Sampled: 11/16/09 13:45 Recvd: 11/20/09 10:30

Volatile Organic Compounds by EPA 8260B

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
1,1,1-Trichloroethane	ND	P11 J	1.0	0.26	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1-Dichloroethane	4.0	P11	1.0	0.38	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,1-Dichloroethene	0.60	P11,J	1.0	0.29	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND	P11	1.0	0.20	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloroethene, Total 320	340	P11,E D	2.0	0.70	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	R11	1.0	0.36	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	R11	1.0	0.39	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
2-Butanone (MEK)	ND	R11	5.0	1.3	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
2-Hexanone	ND	R11	5.0	1.2	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	R11	5.0	0.91	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Acetone	18	P11	5.0	1.3	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Benzene	ND	R11	1.0	0.41	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Bromoform	ND J	P11	1.0	0.26	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Bromomethane	ND	R11	1.0	0.28	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Carbon disulfide	ND	R11	1.0	0.19	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Carbon Tetrachloride	ND	R11	1.0	0.27	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chlorobenzene	ND	R11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chlorodibromomethane	ND	R11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chloroethane	ND	R11	1.0	0.32	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Chloromethane	ND	R11	1.0	0.35	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
cis-1,2-Dichloroethene 32.0	340	P11,E D	1.0	0.38	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	R11	1.0	0.36	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Cyclohexane	ND	P11	1.0	0.53	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND	P11	1.0	0.16	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
trans-1,2-Dichloroethene	4.8	P11	1.0	0.42	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Trichloroethene	3.2	R11	1.0	0.46	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Kamer Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01 (GW-1 - Water) - cont.						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11 J	1.0	0.15	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Vinyl chloride	94	P11	1.0	0.24	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 17:55	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*99 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 17:55*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 17:55*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*95 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 17:55*	*DHC*	*9K24017*	*8260B*

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Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01RE1 (GW-1 - Water)						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08, P11	5.0	1.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08, P11	5.0	1.1	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08, P11	5.0	1.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08, P11	5.0	1.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1-Dichloroethane	3.9	D08, P11,J	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08, P11	5.0	1.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08, P11	5.0	0.83	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08, P11	5.0	1.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08, P11	5.0	1.1	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloroethene, Total	320	D08, P11	10	3.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08, P11	25	6.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
2-Hexanone	ND	D08, P11	25	6.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08, P11	25	4.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Acetone	15	D08, P11,J	25	6.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Benzene	ND	D08, P11	5.0	2.0	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Bromodichloromethane	ND	D08, P11	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Bromoform	ND	D08, P11	5.0	1.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Bromomethane	ND	D08, P11	5.0	1.4	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Carbon disulfide	ND	D08, P11	5.0	0.97	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08, P11	5.0	1.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chlorobenzene	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chloroethane	ND	D08, P11	5.0	1.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chloroform	ND	D08, P11	5.0	1.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Chloromethane	ND	D08, P11	5.0	1.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
cis-1,2-Dichloroethene	320	D08, P11	5.0	1.9	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Cyclohexane	ND	D08, P11	5.0	2.7	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08, P11	5.0	1.4	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Ethylbenzene	ND	D08, P11	5.0	0.92	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Isopropylbenzene	ND	D08, P11	5.0	0.96	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methyl Acetate	ND	D08, P11	5.0	2.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08, P11	5.0	0.80	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methylcyclohexane	ND	D08, P11	5.0	2.5	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Methylene Chloride	ND	D08, P11	5.0	2.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Styrene	ND	D08, P11	5.0	0.92	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Tetrachloroethene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Toluene	ND	D08, P11	5.0	2.6	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
trans-1,2-Dichloroethene	4.2	D08, P11,J	5.0	2.1	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08, P11	5.0	1.8	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Trichloroethene	2.6	D08, P11,J	5.0	2.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-01RE1 (GW-1 - Water) - cont.						**Sampled: 11/16/09 13:45**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08, P11	5.0	0.76	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Vinyl acetate	ND	D08, P11	25	4.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Vinyl chloride	91	D08, P11	5.0	1.2	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
Xylenes, total	ND	D08, P11	10	3.3	ug/L	5.00	11/25/09 12:19	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*96 %*	*D08, P11*	*Surr Limits: (66-137%)*				*11/25/09 12:19*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*98 %*	*D08, P11*	*Surr Limits: (73-120%)*				*11/25/09 12:19*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*95 %*	*D08, P11*	*Surr Limits: (71-126%)*				*11/25/09 12:19*	*DHC*	*9K25014*	*8260B*

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Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-02 (GW-2 - Water)						**Sampled: 11/17/09 08:40**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1-Dichloroethane	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,1-Dichloroethene	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichlorobenzene	14	P11	1.0	0.20	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloroethene, Total	76	P11	2.0	0.70	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
2-Butanone (MEK)	ND	P11	5.0	1.3	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
2-Hexanone	ND	P11	5.0	1.2	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	P11	5.0	0.91	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Acetone	26	P11	5.0	1.3	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Benzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Bromoform	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Bromomethane	ND	P11	1.0	0.28	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Carbon disulfide	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Carbon Tetrachloride	ND	P11	1.0	0.27	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chlorobenzene	2.8	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chlorodibromomethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chloroethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Chloromethane	ND	P11	1.0	0.35	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
cis-1,2-Dichloroethene	74	P11	1.0	0.38	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Cyclohexane	ND	P11	1.0	0.53	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND	P11	1.0	0.16	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
trans-1,2-Dichloroethene	2.1	P11	1.0	0.42	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Trichloroethene	1.1	P11	1.0	0.46	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-02 (GW-2 - Water) - cont.						**Sampled: 11/17/09 08:40**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11	1.0	0.15	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Vinyl chloride	17	P11	1.0	0.24	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 18:19	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*98 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 18:19*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*96 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 18:19*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*94 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 18:19*	*DHC*	*9K24017*	*8260B*

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ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03 (GW-3 - Water)						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	R11	1.0	0.26	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1-Dichloroethane	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,1-Dichloroethene	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND	P11	1.0	0.20	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloroethene, Total	0.82	P11,J	2.0	0.70	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
2-Butanone (MEK)	ND	R11	5.0	1.3	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
2-Hexanone	ND	R11	5.0	1.2	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	P11	5.0	0.91	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Acetone	12	P11	5.0	1.3	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Benzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Bromoform	ND J	R11	1.0	0.26	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Bromomethane	ND	R11	1.0	0.28	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Carbon disulfide	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Carbon Tetrachloride	ND	R11	1.0	0.27	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chlorobenzene	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chlorodibromomethane	ND	R11	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chloroethane	170 180	P11,E,D	1.0	0.32	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Chloromethane	ND	P11	1.0	0.35	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
cis-1,2-Dichloroethene	0.82	P11,J	1.0	0.38	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Cyclohexane	ND	R11	1.0	0.53	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methyl tert-Butyl Ether	0.73	P11,J	1.0	0.16	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND	P11	1.0	0.42	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Trichloroethene	ND	P11	1.0	0.46	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03 (GW-3 - Water) - cont.						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11	1.0	0.15	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Vinyl chloride	ND	P11	1.0	0.24	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 18:44	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*96 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 18:44*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*96 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 18:44*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*92 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 18:44*	*DHC*	*9K24017*	*8260B*

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Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03RE1 (GW-3 - Water)						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08	4.0	0.85	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08	4.0	0.92	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08	4.0	1.2	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1-Dichloroethane	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08	4.0	1.2	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08	4.0	0.66	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08	4.0	0.81	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08	4.0	0.86	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloroethene, Total	ND	D08	8.0	2.8	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08	4.0	1.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08	20	5.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
2-Hexanone	ND	D08	20	5.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08	20	3.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Acetone	10	D08,J	20	5.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Benzene	ND	D08	4.0	1.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Bromodichloromethane	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Bromoform	ND	D08	4.0	1.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Bromomethane	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Carbon disulfide	ND	D08	4.0	0.78	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chlorobenzene	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chloroethane	170	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chloroform	ND	D08	4.0	1.3	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Chloromethane	ND	D08	4.0	1.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
cis-1,2-Dichloroethene	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08	4.0	1.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Cyclohexane	ND	D08	4.0	2.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08	4.0	1.1	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Ethylbenzene	ND	D08	4.0	0.74	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Isopropylbenzene	ND	D08	4.0	0.77	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methyl Acetate	ND	D08	4.0	2.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08	4.0	0.64	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methylcyclohexane	ND	D08	4.0	2.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Methylene Chloride	ND	D08	4.0	1.8	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Styrene	ND	D08	4.0	0.74	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Tetrachloroethene	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Toluene	ND	D08	4.0	2.0	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
trans-1,2-Dichloroethene	ND	D08	4.0	1.7	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08	4.0	1.5	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Trichloroethene	ND	D08	4.0	1.8	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-03RE1 (GW-3 - Water) - cont.						**Sampled: 11/17/09 09:02**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08	4.0	0.61	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Vinyl acetate	ND	D08	20	3.4	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Vinyl chloride	ND	D08	4.0	0.97	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
Xylenes, total	ND	D08	8.0	2.6	ug/L	4.00	11/25/09 12:43	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*95 %*	*D08*	*Surr Limits: (66-137%)*				*11/25/09 12:43*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*98 %*	*D08*	*Surr Limits: (73-120%)*				*11/25/09 12:43*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*94 %*	*D08*	*Surr Limits: (71-126%)*				*11/25/09 12:43*	*DHC*	*9K25014*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
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Work Order: RSK0991

Project: LMC - Utica Site
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Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-04 (GW-4 - Water)						**Sampled: 11/17/09 11:10**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND	P11	1.0	0.23	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND	P11	1.0	0.31	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1-Dichloroethane	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,1-Dichloroethene	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND	P11	1.0	0.17	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND	P11	1.0	0.20	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloroethane	ND	P11	1.0	0.21	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloroethene, Total	ND	P11	2.0	0.70	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloropropane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
2-Butanone (MEK)	ND	P11	5.0	1.3	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
2-Hexanone	ND	P11	5.0	1.2	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND	P11	5.0	0.91	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Acetone	5.0	P11	5.0	1.3	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Benzene	ND	P11	1.0	0.41	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Bromodichloromethane	ND	P11	1.0	0.39	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Bromoform	ND	P11	1.0	0.26	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Bromomethane	ND	P11	1.0	0.28	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Carbon disulfide	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Carbon Tetrachloride	ND	P11	1.0	0.27	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chlorobenzene	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chlorodibromomethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chloroethane	ND	P11	1.0	0.32	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chloroform	ND	P11	1.0	0.34	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Chloromethane	ND	P11	1.0	0.35	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
cis-1,2-Dichloroethene	ND	P11	1.0	0.38	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Cyclohexane	ND	P11	1.0	0.53	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Dichlorodifluoromethane	ND	P11	1.0	0.29	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Ethylbenzene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Isopropylbenzene	ND	P11	1.0	0.19	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methyl Acetate	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND	P11	1.0	0.16	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methylcyclohexane	ND	P11	1.0	0.50	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Methylene Chloride	ND	P11	1.0	0.44	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Styrene	ND	P11	1.0	0.18	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Tetrachloroethene	ND	P11	1.0	0.36	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Toluene	ND	P11	1.0	0.51	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND	P11	1.0	0.42	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND	P11	1.0	0.37	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Trichloroethene	ND	P11	1.0	0.46	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-04 (GW-4 - Water) - cont.						**Sampled: 11/17/09 11:10**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	P11	1.0	0.15	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Vinyl acetate	ND	P11	5.0	0.85	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Vinyl chloride	ND	P11	1.0	0.24	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
Xylenes, total	ND	P11	2.0	0.66	ug/L	1.00	11/24/09 19:08	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*95 %*	*P11*	*Surr Limits: (66-137%)*				*11/24/09 19:08*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*	*P11*	*Surr Limits: (73-120%)*				*11/24/09 19:08*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*96 %*	*P11*	*Surr Limits: (71-126%)*				*11/24/09 19:08*	*DHC*	*9K24017*	*8260B*

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THE LEADER IN ENVIRONMENTAL TESTING

ARCADIS U.S., Inc. - Albany, NY
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Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05 (GW-6 - Water)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1-Dichloroethane	0.80	J	1.0	0.38	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND		1.0	0.17	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloroethene, Total	4.7		2.0	0.70	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
2-Butanone (MEK)	ND		5.0	1.3	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Bromoform	ND J		1.0	0.26	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chlorodibromomethane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
cis-1,2-Dichloroethene	4.7		1.0	0.38	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Ethylbenzene	1.9		1.0	0.18	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND		1.0	0.16	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Tetrachloroethene	620 500 D E		1.0	0.36	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Toluene	46		1.0	0.51	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Trichloroethene	27		1.0	0.46	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
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Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05 (GW-6 - Water) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Vinyl acetate	ND		5.0	0.85	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
Xylenes, total	5.2		2.0	0.66	ug/L	1.00	11/24/09 19:32	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*95 %*		*Surr Limits: (66-137%)*				*11/24/09 19:32*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*		*Surr Limits: (73-120%)*				*11/24/09 19:32*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*92 %*		*Surr Limits: (71-126%)*				*11/24/09 19:32*	*DHC*	*9K24017*	*8260B*

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465 New Karner Road
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Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05RE1 (GW-6 - Water)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08	10	2.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08	10	2.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08	10	2.3	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08	10	3.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1-Dichloroethane	ND	D08	10	3.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08	10	2.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08	10	4.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08	10	3.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08	10	1.7	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08	10	2.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08	10	2.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloroethene, Total	ND	D08	20	7.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08	10	3.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08	10	3.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08	50	13	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
2-Hexanone	ND	D08	50	12	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08	50	9.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Acetone	ND	D08	50	13	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Benzene	ND	D08	10	4.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Bromodichloromethane	ND	D08	10	3.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Bromoform	ND	D08	10	2.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Bromomethane	ND	D08	10	2.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Carbon disulfide	ND	D08	10	1.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08	10	2.7	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chlorobenzene	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chloroethane	ND	D08	10	3.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chloroform	ND	D08	10	3.4	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Chloromethane	ND	D08	10	3.5	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
cis-1,2-Dichloroethene	**5.9**	D08,J	10	3.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08	10	3.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Cyclohexane	ND	D08	10	5.3	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08	10	2.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Ethylbenzene	ND	D08	10	1.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Isopropylbenzene	ND	D08	10	1.9	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methyl Acetate	ND	D08	10	5.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08	10	1.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methylcyclohexane	ND	D08	10	5.0	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Methylene Chloride	ND	D08	10	4.4	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Styrene	ND	D08	10	1.8	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Tetrachloroethene	**620**	D08	10	3.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Toluene	**44**	D08	10	5.1	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
trans-1,2-Dichloroethene	ND	D08	10	4.2	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08	10	3.7	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Trichloroethene	**28**	D08	10	4.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-05RE1 (GW-6 - Water) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08	10	1.5	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Vinyl acetate	ND	D08	50	8.5	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Vinyl chloride	ND	D08	10	2.4	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
Xylenes, total	ND	D08	20	6.6	ug/L	10.0	11/25/09 13:07	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*97 %*	*D08*	*Surr Limits: (66-137%)*				*11/25/09 13:07*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*98 %*	*D08*	*Surr Limits: (73-120%)*				*11/25/09 13:07*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*96 %*	*D08*	*Surr Limits: (71-126%)*				*11/25/09 13:07*	*DHC*	*9K25014*	*8260B*

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ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06 (GW-5 - Water)						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	3.5		1.0	0.31	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1-Dichloroethane	450 ~~440~~	D E	1.0	0.38	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,1-Dichloroethene	2.2		1.0	0.29	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND		1.0	0.17	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloroethene, Total	100		2.0	0.70	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
2-Butanone (MEK)	ND		5.0	1.3	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Acetone	6.1		5.0	1.3	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Bromoform	ND	J	1.0	0.26	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chlorodibromomethane	ND		1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chloroethane	130 120	D E	1.0	0.32	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
cis-1,2-Dichloroethene	100		1.0	0.38	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND		1.0	0.16	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Tetrachloroethene	1.5		1.0	0.36	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Trichloroethene	47		1.0	0.46	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06 (GW-5 - Water) - cont.						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Vinyl acetate	ND		5.0	0.85	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Vinyl chloride	**22**		1.0	0.24	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
Xylenes, total	ND		2.0	0.66	ug/L	1.00	11/24/09 19:56	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*97 %*		*Surr Limits: (66-137%)*				*11/24/09 19:56*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*97 %*		*Surr Limits: (73-120%)*				*11/24/09 19:56*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*95 %*		*Surr Limits: (71-126%)*				*11/24/09 19:56*	*DHC*	*9K24017*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06RE1 (GW-5 - Water)						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08	8.0	2.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1,2,2-Tetrachloroethane	ND	D08	8.0	1.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1,2-Trichloroethane	ND	D08	8.0	1.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08	8.0	2.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1-Dichloroethane	450	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,1-Dichloroethene	ND	D08	8.0	2.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2,4-Trichlorobenzene	ND	D08	8.0	3.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dibromo-3-chloropropane	ND	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dibromoethane (EDB)	ND	D08	8.0	1.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichlorobenzene	ND	D08	8.0	1.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloroethane	ND	D08	8.0	1.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloroethene, Total	100	D08	16	5.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloropropane	ND	D08	8.0	2.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,3-Dichlorobenzene	ND	D08	8.0	2.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,4-Dichlorobenzene	ND	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
2-Butanone (MEK)	ND	D08	40	11	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
2-Hexanone	ND	D08	40	9.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08	40	7.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Acetone	ND	D08	40	11	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Benzene	ND	D08	8.0	3.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Bromodichloromethane	ND	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Bromoform	ND	D08	8.0	2.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Bromomethane	ND	D08	8.0	2.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Carbon disulfide	ND	D08	8.0	1.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Carbon Tetrachloride	ND	D08	8.0	2.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chlorobenzene	ND	D08	8.0	2.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chlorodibromomethane	ND	D08	8.0	2.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chloroethane	130	D08	8.0	2.6	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chloroform	ND	D08	8.0	2.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Chloromethane	ND	D08	8.0	2.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
cis-1,2-Dichloroethene	100	D08	8.0	3.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
cis-1,3-Dichloropropene	ND	D08	8.0	2.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Cyclohexane	ND	D08	8.0	4.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Dichlorodifluoromethane	ND	D08	8.0	2.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Ethylbenzene	ND	D08	8.0	1.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Isopropylbenzene	ND	D08	8.0	1.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methyl Acetate	ND	D08	8.0	4.0	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methyl tert-Butyl Ether	ND	D08	8.0	1.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methylcyclohexane	ND	D08	8.0	4.0	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Methylene Chloride	ND	D08	8.0	3.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Styrene	ND	D08	8.0	1.5	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Tetrachloroethene	ND	D08	8.0	2.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Toluene	ND	D08	8.0	4.1	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
trans-1,2-Dichloroethene	ND	D08	8.0	3.4	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
trans-1,3-Dichloropropene	ND	D08	8.0	2.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Trichloroethene	48	D08	8.0	3.7	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B

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465 New Karner Road
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Work Order: RSK0991

Project: LMC - Utica Site
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Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-06RE1 (GW-5 - Water) - cont.						**Sampled: 11/19/09 11:25**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Trichlorofluoromethane	ND	D08	8.0	1.2	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Vinyl acetate	ND	D08	40	6.8	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Vinyl chloride	23	D08	8.0	1.9	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
Xylenes, total	ND	D08	16	5.3	ug/L	8.00	11/25/09 13:32	DHC	9K25014	8260B
1,2-Dichloroethane-d4	*97 %*	*D08*	*Surr Limits: (66-137%)*				*11/25/09 13:32*	*DHC*	*9K25014*	*8260B*
4-Bromofluorobenzene	*96 %*	*D08*	*Surr Limits: (73-120%)*				*11/25/09 13:32*	*DHC*	*9K25014*	*8260B*
Toluene-d8	*95 %*	*D08*	*Surr Limits: (71-126%)*				*11/25/09 13:32*	*DHC*	*9K25014*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07 (GW-6 (11-12) - Solid)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	W1	130	9.8	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1,2,2-Tetrachloroethane	ND	W1	130	22	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1,2-Trichloroethane	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1,2-Trichlorotrifluoroethane	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1-Dichloroethane	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,1-Dichloroethene	ND	W1	130	16	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2,4-Trichlorobenzene	ND	W1	130	8.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dibromo-3-chloropropane	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dibromoethane (EDB)	ND	W1	130	5.1	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichlorobenzene	ND	W1	130	10	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichloroethane	ND	W1	130	6.8	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichloropropane	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,3-Dichlorobenzene	ND	W1	130	7.0	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,4-Dichlorobenzene	ND	W1	130	19	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
2-Butanone (MEK)	510	W1,J	670	48	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
2-Hexanone	ND	W1	670	46	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
4-Methyl-2-pentanone (MIBK)	ND	W1	670	43	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Acetone	ND	W1	670	30	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Benzene	ND	W1	130	6.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Bromodichloromethane	ND	W1	130	6.9	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Bromoform	ND	W1	130	67	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Bromomethane	ND	W1	130	30	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Carbon disulfide	ND	W1	130	12	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Carbon Tetrachloride	ND	W1	130	13	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chlorobenzene	ND	W1	130	18	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chlorodibromomethane	ND	W1	130	7.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chloroethane	ND	W1	130	57	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chloroform	ND	W1	130	8.3	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Chloromethane	ND	W1	130	8.1	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
cis-1,2-Dichloroethene	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
cis-1,3-Dichloropropene	ND	W1	130	7.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Cyclohexane	ND	W1	130	6.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Dichlorodifluoromethane	ND	W1	130	11	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Ethylbenzene	4200	W1	130	9.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Isopropylbenzene	ND	W1	130	20	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methyl Acetate	ND	W1	130	7.3	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methyl tert-Butyl Ether	ND	W1	130	13	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methylcyclohexane	ND	W1	130	8.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Methylene Chloride	ND	W1	130	27	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Styrene	ND	W1	130	6.7	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Tetrachloroethene 290000	170000	W1,E D	130	18	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Toluene	10000	W1	130	10	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
trans-1,2-Dichloroethene	ND	W1	130	14	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
trans-1,3-Dichloropropene	ND	W1	130	6.5	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Trichloroethene	3100	W1	130	9.2	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Trichlorofluoromethane	ND	W1	130	13	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B

ARCADIS U.S., Inc. - Albany, NY
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Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

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Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07 (GW-6 (11-12) - Solid) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Vinyl chloride	ND	W1	270	16	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
Xylenes, total	**15000**	W1	270	23	ug/kg dry	1.00	11/27/09 16:47	DHC	9K27033	8260B
1,2-Dichloroethane-d4	*133 %*	*W1*	*Surr Limits: (10-190%)*				*11/27/09 16:47*	*DHC*	*9K27033*	*8260B*
4-Bromofluorobenzene	*125 %*	*W1*	*Surr Limits: (10-190%)*				*11/27/09 16:47*	*DHC*	*9K27033*	*8260B*
Toluene-d8	*134 %*	*W1*	*Surr Limits: (10-190%)*				*11/27/09 16:47*	*DHC*	*9K27033*	*8260B*

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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07RE1 (GW-6 (11-12) - Solid)						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND	D08, W1, N1	6700	490	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1,2,2-Tetrachloroethane	ND	D08, W1, N1	6700	1100	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1,2-Trichloroethane	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1,2-Trichlorotrifluoroethane	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1-Dichloroethane	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,1-Dichloroethene	ND	D08, W1, N1	6700	820	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2,4-Trichlorobenzene	ND	D08, W1, N1	6700	410	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dibromo-3-chloropropane	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dibromoethane (EDB)	ND	D08, W1, N1	6700	260	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichlorobenzene	ND	D08, W1, N1	6700	520	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichloroethane	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichloropropane	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,3-Dichlorobenzene	ND	D08, W1, N1	6700	350	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,4-Dichlorobenzene	ND	D08, W1, N1	6700	940	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
2-Butanone (MEK)	ND	D08, W1, N1	34000	2400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
2-Hexanone	ND	D08, W1, N1	34000	2300	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
4-Methyl-2-pentanone (MIBK)	ND	D08, W1, N1	34000	2200	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Acetone	ND	D08, W1, N1	34000	1500	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Benzene	ND	D08, W1, N1	6700	320	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Bromodichloromethane	ND	D08, W1, N1	6700	350	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Bromoform	ND	D08, W1, N1	6700	3400	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Bromomethane	ND	D08, W1, N1	6700	1500	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Carbon disulfide	ND	D08, W1, N1	6700	580	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Carbon Tetrachloride	ND	D08, W1, N1	6700	650	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chlorobenzene	ND	D08, W1, N1	6700	890	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chlorodibromomethane	ND	D08, W1, N1	6700	380	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-07RE1 (GW-6 (11-12) - Solid) - cont.						**Sampled: 11/18/09 11:15**		**Recvd: 11/20/09 10:30**		
Volatile Organic Compounds by EPA 8260B - cont.										
Chloroethane	ND	D08, W1, N1	6700	2800	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chloroform	ND	D08, W1, N1	6700	410	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Chloromethane	ND	D08, W1, N1	6700	410	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
cis-1,2-Dichloroethene	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
cis-1,3-Dichloropropene	ND	D08, W1, N1	6700	380	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Cyclohexane	ND	D08, W1, N1	6700	310	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Dichlorodifluoromethane	ND	D08, W1, N1	6700	550	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Ethylbenzene	5000	D08, W1, N1,J	6700	460	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Isopropylbenzene	ND	D08, W1, N1	6700	1000	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methyl Acetate	ND	D08, W1, N1	6700	360	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methyl tert-Butyl Ether	ND	D08, W1, N1	6700	660	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methylcyclohexane	ND	D08, W1, N1	6700	440	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Methylene Chloride	ND	D08, W1, N1	6700	1300	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Styrene	ND	D08, W1, N1	6700	340	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Tetrachloroethene	290000	D08, W1, N1	6700	900	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Toluene	13000	D08, W1, N1	6700	510	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
trans-1,2-Dichloroethene	ND	D08, W1, N1	6700	700	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
trans-1,3-Dichloropropene	ND	D08, W1, N1	6700	320	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Trichloroethene	4000	D08, W1, N1,J	6700	460	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Trichlorofluoromethane	ND	D08, W1, N1	6700	630	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Vinyl chloride	ND	D08, W1, N1	13000	820	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
Xylenes, total	15000	D08, W1, N1	13000	1100	ug/kg dry	50.0	11/30/09 13:25	RJ	9K27033	8260B
1,2-Dichloroethane-d4	*126 %*	*D08, W1, N1*	*Surr Limits: (10-190%)*				*11/30/09 13:25*	*RJ*	*9K27033*	*8260B*
4-Bromofluorobenzene	*116 %*	*D08, W1, N1*	*Surr Limits: (10-190%)*				*11/30/09 13:25*	*RJ*	*9K27033*	*8260B*
Toluene-d8	*128 %*	*D08, W1, N1*	*Surr Limits: (10-190%)*				*11/30/09 13:25*	*RJ*	*9K27033*	*8260B*

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
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Work Order: RSK0991

Project: LMC - Utica Site
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Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-08 (TRIP BLANK - Water)						**Sampled: 11/19/09**			**Recvd: 11/20/09 10:30**	
Volatile Organic Compounds by EPA 8260B										
1,1,1-Trichloroethane	ND		1.0	0.26	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1,2-Trichlorotrifluoroethane	ND		1.0	0.31	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1-Dichloroethane	ND		1.0	0.38	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,1-Dichloroethene	ND		1.0	0.29	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dibromo-3-chloropropane	ND		1.0	0.39	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dibromoethane (EDB)	ND		1.0	0.17	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichlorobenzene	ND		1.0	0.20	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloroethane	ND		1.0	0.21	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloroethene, Total	ND		2.0	0.70	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloropropane	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,3-Dichlorobenzene	ND		1.0	0.36	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,4-Dichlorobenzene	ND		1.0	0.39	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
2-Butanone (MEK)	ND		5.0	1.3	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
2-Hexanone	ND		5.0	1.2	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.91	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Acetone	ND		5.0	1.3	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Benzene	ND		1.0	0.41	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Bromodichloromethane	ND		1.0	0.39	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Bromoform	ND		1.0	0.26	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Bromomethane	ND		1.0	0.28	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Carbon disulfide	ND		1.0	0.19	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Carbon Tetrachloride	ND		1.0	0.27	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chlorobenzene	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chlorodibromomethane	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chloroethane	ND		1.0	0.32	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chloroform	ND		1.0	0.34	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Chloromethane	ND		1.0	0.35	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
cis-1,2-Dichloroethene	ND		1.0	0.38	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Cyclohexane	ND		1.0	0.53	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Dichlorodifluoromethane	ND		1.0	0.29	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Ethylbenzene	ND		1.0	0.18	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Isopropylbenzene	ND		1.0	0.19	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methyl Acetate	ND		1.0	0.50	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methyl tert-Butyl Ether	ND		1.0	0.16	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methylcyclohexane	ND		1.0	0.50	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Methylene Chloride	ND		1.0	0.44	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Styrene	ND		1.0	0.18	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Tetrachloroethene	ND		1.0	0.36	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Toluene	ND		1.0	0.51	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
trans-1,2-Dichloroethene	ND		1.0	0.42	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Trichloroethene	ND		1.0	0.46	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Trichlorofluoromethane	ND		1.0	0.15	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B

ARCADIS U.S., Inc. - Albany, NY
465 New Karner Road
Albany, NY 12205

Work Order: RSK0991

Project: LMC - Utica Site
Project Number: AGM

Received: 11/20/09
Reported: 01/12/10 13:15

Analytical Report

Analyte	Sample Result	Data Qualifiers	RL	MDL	Units	Dil Fac	Date Analyzed	Lab Tech	Batch	Method
Sample ID: RSK0991-08 (TRIP BLANK - Water) - cont.						**Sampled: 11/19/09**			**Recvd: 11/20/09 10:30**	
Volatile Organic Compounds by EPA 8260B - cont.										
Vinyl acetate	ND		5.0	0.85	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Vinyl chloride	ND		1.0	0.24	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
Xylenes, total	ND		2.0	0.66	ug/L	1.00	11/24/09 20:21	DHC	9K24017	8260B
1,2-Dichloroethane-d4	*95 %*		*Surr Limits: (66-137%)*				*11/24/09 20:21*	*DHC*	*9K24017*	*8260B*
4-Bromofluorobenzene	*98 %*		*Surr Limits: (73-120%)*				*11/24/09 20:21*	*DHC*	*9K24017*	*8260B*
Toluene-d8	*95 %*		*Surr Limits: (71-126%)*				*11/24/09 20:21*	*DHC*	*9K24017*	*8260B*

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0907)

Client: Arcadis for LMC Utica	Project Manager: Jeff Bonsted	Date: 11/19/09	Chain of Custody Number: 391904
Address: French Road	Telephone Number (Area Code)/Fax Number	Lab Number: NY9A4463	Page 1 of 1
City: New Hartford/Utica	State: NY	Zip Code: 13413	Site Contact: Dan Zuck	Lab Contact: ~~EC, L, Fox~~ ~~Jeffrey Haughey~~
Project Name and Location (State): LMC Utica, NY	Carrier/Waybill Number: ~~Fed Ex~~ UPS 1247-244-8750	
Contract/Purchase Order/Quote No: NJ000637,0001.00002		

Analysis (Attach list if more space is needed): VOCs 8260 (4260); VOCs 8260B

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	VOCs 4260	VOCs 8260B
GW-1	11/16/09	1345		X						3			X	
GW-2	11/17/09	0840		X						3			X	
GW-3	11/17/09	0902		X						3			X	
GW-4	11/17/09	1110		X						3			X	
GW-6	11/18/09	1115		X						3			X	
GW-6 (11-712)	11/18/09	1115				X		X						X
TB	11/19/09	—		X						3			X	
GW-5	11/19/09	1125		X						3			X	

Special Instructions/ Conditions of Receipt

45/328

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown

Sample Disposal: [ ] Return To Client [X] Disposal By Lab [ ] Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: [ ] 24 Hours [ ] 48 Hours [ ] 7 Days [ ] 14 Days [ ] 21 Days [X] Other 5 Day TAT

QC Requirements (Specify)

1. Relinquished By	Date: 11/19/09	Time: 1655	1. Received By: BURT	Date: 11-20-09	Time: 1030
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: 2.0°C

DISTRIBUTION: WHITE - Returned to Client with Report. CANARY - Stays with the Sample. PINK - Field Copy

ARCADIS
Infrastructure, environment, buildings

Lockheed Martin Corporation

Data Usability Summary Report

UTICA, NEW YORK

Volatile Analyses

SDG#C0912043

Analyses Performed By:
Centek Laboratories, LLC
Syracuse, New York

Report: #11438R
Review Level: Tier III
Project: NJ001001.0001.0001

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #C0912043 for samples collected in association with the Lockheed Martin Utica Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
AMB-121806	C0912043-001A	AIR	12/18/09		X				
PZ-21	C0912043-002A	AIR	12/18/09		X				

ANALYTICAL DATA PACKAGE DOCUMENTATION
GENERAL INFORMATION

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15 and ASTM D1946. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999, USEPA Region II SOP HW-31 Validating Air Samples Volatile Organic Analysis of Ambient Air In Canister by Method TO-15 of October 2006, New York State DEC Analytical Method ASP 2005 TO-15 (QA/QC Criteria R9 TO-15) and NYSDEC Modifications to R9 TO-15 QA/QC Criteria February 2008.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is

that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Method TO-15	Air	30 days storage from collection to analysis	Ambient temperature

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL.

3. Mass Spectrometer Tuning

Mass spectrometer performance and column resolution was acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibited recoveries within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

Sample locations associated with internal standards exhibiting responses outside of the control limits are presented in the following table.

Sample Locations	Internal Standard	Response
PZ-21	Bromochloromethane	AC
	1,4-Difluorobenzene	>UL
	Chlorobenzene-d5	>UL

AC Acceptable

The criteria used to evaluate the internal standard responses are presented in the following table. In the case of an internal standard deviation, the compounds quantitated under the deviant internal standard are qualified as documented in the table below.

Control limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No action
	Detect	J
< the lower control limit (LL) but > 40%	Non-detect	J
	Detect	J
< 40%	Non-detect	R
	Detect	J

Note: Sample results were not qualified as rejected (R) due to the deviations listed above.

7. Laboratory Control Sample /Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%. The relative percent difference (RPD) between the

LCS/LCSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits; however, sample locations associated with LCS/LCSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
AMB-121806 PZ-21	Carbon disulfide
	Freon 113
	Methylene Chloride

The criteria used to evaluate the RPD between the LCS/LCSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	J
	Detect	J

8. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Laboratory duplicates were not performed as part of this SDG.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Field duplicates were not performed as part of this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure/vacuum (5"Hg ± 1)		X		X	
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)		X		X	
LCS/LCSD Precision (RPD)		X	X		
Field Duplicate (RPD)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X	X		
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					

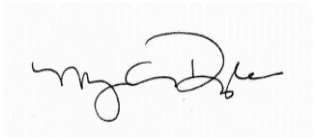
%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	PCB	MET	MISC	
C0912043	12/18/09	TO-15	AMB-121809	Air	No	--	--	--	--	VOC –LCS/LCSD RPD, Internal Standard
C0912043	12/18/09	TO-15	PZ-21	Air	No	--	--	--	--	VOC –LCS/LCSD RPD, Internal Standard

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Mary Ann Doyle

SIGNATURE: 

DATE: January 21, 2010

PEER REVIEW BY: Joseph C. Houser

DATE: January 21, 2010

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

11438 R

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: RJP
1,1,1-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/22/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/22/2009
1,2,4-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/22/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/22/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/22/2009
1,3,5-Trimethylbenzene	< 0.75	0.75		ug/m3	1	12/22/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/22/2009
1,3-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/22/2009
2,2,4-trimethylpentane	< 0.71	0.71		ug/m3	1	12/22/2009
4-ethyltoluene	< 0.75	0.75		ug/m3	1	12/22/2009
Acetone	6.0	0.72		ug/m3	1	12/22/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/22/2009
Benzene	0.62	0.49		ug/m3	1	12/22/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/22/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/22/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/22/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/22/2009
Carbon disulfide	< 0.47	0.47	J	ug/m3	1	12/22/2009
Carbon tetrachloride	0.45	0.26		ug/m3	1	12/22/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/22/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/22/2009
Chloroform	< 0.74	0.74		ug/m3	1	12/22/2009
Chloromethane	0.57	0.31		ug/m3	1	12/22/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Cyclohexane	< 0.52	0.52		ug/m3	1	12/22/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/22/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/22/2009
Ethylbenzene	< 0.66	0.66		ug/m3	1	12/22/2009
Freon 11	0.91	0.86		ug/m3	1	12/22/2009
Freon 113	< 1.2	1.2	J	ug/m3	1	12/22/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	AMB-121806
Lab Order:	C0912043	**Tag Number:**	199,19
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		TO-15				Analyst: RJP
Freon 12	1.9	0.75		ug/m3	1	12/22/2009
Heptane	< 0.62	0.62		ug/m3	1	12/22/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/22/2009
Hexane	< 0.54	0.54		ug/m3	1	12/22/2009
Isopropyl alcohol	0.70	0.37		ug/m3	1	12/22/2009
m&p-Xylene	< 1.3	1.3		ug/m3	1	12/22/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/22/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/22/2009
Methylene chloride	< 0.53	0.53	J	ug/m3	1	12/22/2009
o-Xylene	< 0.66	0.66		ug/m3	1	12/22/2009
Propylene	< 0.26	0.26		ug/m3	1	12/22/2009
Styrene	< 0.65	0.65		ug/m3	1	12/22/2009
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	12/22/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/22/2009
Toluene	0.69	0.57		ug/m3	1	12/22/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Trichloroethene	< 0.22	0.22		ug/m3	1	12/22/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/22/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/22/2009
Vinyl chloride	< 0.10	0.10		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: RJP
1,1,1-Trichloroethane	3.4 J	0.83		ug/m3	1	12/22/2009
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	12/22/2009
1,1,2-Trichloroethane	< 0.83	0.83		ug/m3	1	12/22/2009
1,1-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,1-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	12/22/2009
1,2,4-Trimethylbenzene	13 J	0.75		ug/m3	1	12/22/2009
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	12/22/2009
1,2-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,2-Dichloroethane	< 0.62	0.62		ug/m3	1	12/22/2009
1,2-Dichloropropane	< 0.70	0.70		ug/m3	1	12/22/2009
1,3,5-Trimethylbenzene	2.1 J	0.75		ug/m3	1	12/22/2009
1,3-butadiene	< 0.34	0.34		ug/m3	1	12/22/2009
1,3-Dichlorobenzene	2.4 J	0.92		ug/m3	1	12/22/2009
1,4-Dichlorobenzene	< 0.92	0.92		ug/m3	1	12/22/2009
1,4-Dioxane	< 1.1	1.1		ug/m3	1	12/22/2009
2,2,4-trimethylpentane	1.7 J	0.71		ug/m3	1	12/22/2009
4-ethyltoluene	3.7 J	0.75		ug/m3	1	12/22/2009
Acetone	3.9	0.72		ug/m3	1	12/22/2009
Allyl chloride	< 0.48	0.48		ug/m3	1	12/22/2009
Benzene	4.7 J	0.49		ug/m3	1	12/22/2009
Benzyl chloride	< 0.88	0.88		ug/m3	1	12/22/2009
Bromodichloromethane	< 1.0	1.0		ug/m3	1	12/22/2009
Bromoform	< 1.6	1.6		ug/m3	1	12/22/2009
Bromomethane	< 0.59	0.59		ug/m3	1	12/22/2009
Carbon disulfide	1.6 J	0.47		ug/m3	1	12/22/2009
Carbon tetrachloride	< 0.96	0.96		ug/m3	1	12/22/2009
Chlorobenzene	< 0.70	0.70		ug/m3	1	12/22/2009
Chloroethane	< 0.40	0.40		ug/m3	1	12/22/2009
Chloroform	8.5	0.74		ug/m3	1	12/22/2009
Chloromethane	0.27	0.31	J	ug/m3	1	12/22/2009
cis-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
cis-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Cyclohexane	4.3 J	0.52		ug/m3	1	12/22/2009
Dibromochloromethane	< 1.3	1.3		ug/m3	1	12/22/2009
Ethyl acetate	< 0.92	0.92		ug/m3	1	12/22/2009
Ethylbenzene	6.0 J	0.66		ug/m3	1	12/22/2009
Freon 11	0.63	0.86	J	ug/m3	1	12/22/2009
Freon 113	1.2 J	1.2		ug/m3	1	12/22/2009
Freon 114	< 1.1	1.1		ug/m3	1	12/22/2009

Qualifiers:

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S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *16-Jan-10*

CLIENT:	Arcadis	**Client Sample ID:**	PZ-21
Lab Order:	C0912043	**Tag Number:**	330,403
Project:	Utica - Soil Vapor	**Collection Date:**	12/18/2009
Lab ID:	C0912043-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	1.7	0.75		ug/m3	1	12/22/2009
Heptane	3.7 J	0.62		ug/m3	1	12/22/2009
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	12/22/2009
Hexane	6.1	0.54		ug/m3	1	12/22/2009
Isopropyl alcohol	10	7.5		ug/m3	20	12/22/2009
m&p-Xylene	12 J	26	J	ug/m3	20	12/22/2009
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl Ethyl Ketone	< 0.90	0.90		ug/m3	1	12/22/2009
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	12/22/2009
Methyl tert-butyl ether	< 0.55	0.55		ug/m3	1	12/22/2009
Methylene chloride	< 0.53 J	0.53		ug/m3	1	12/22/2009
o-Xylene	7.4 J	0.66		ug/m3	1	12/22/2009
Propylene	< 0.26	0.26		ug/m3	1	12/22/2009
Styrene	< 0.65	0.65		ug/m3	1	12/22/2009
Tetrachloroethylene	3.1 J	1.0		ug/m3	1	12/22/2009
Tetrahydrofuran	< 0.45	0.45		ug/m3	1	12/22/2009
Toluene	21 J	11		ug/m3	20	12/22/2009
trans-1,2-Dichloroethene	< 0.60	0.60		ug/m3	1	12/22/2009
trans-1,3-Dichloropropene	< 0.69	0.69		ug/m3	1	12/22/2009
Trichloroethene	3.0 J	0.82		ug/m3	1	12/22/2009
Vinyl acetate	< 0.54	0.54		ug/m3	1	12/22/2009
Vinyl Bromide	< 0.67	0.67		ug/m3	1	12/22/2009
Vinyl chloride	< 0.39	0.39		ug/m3	1	12/22/2009

Qualifiers:

**	Reporting Limit	.	Results reported are not blank corrected
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Centek Laboratories, LLC

143 Midler Park Drive
Syracuse, NY 13206
Phone: 315-431-9730 Fax: 315-431-9731 Emergency: 315-416-2752

Chain of Custody

Site Name: LMC Utica
Project: ✓
PO#: NJ000637.1.2
Other:

Detection Limit	Report Level
☐ 5ppbv	☐ Level I
☐ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE .25	☐ Cat "B" Like

Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	12/28
4 Business Days	☐	35%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
Next Day by 5pm	☐	100%	
Next Day by Noon	☐	150%	
Same Day	☐	200%	

Company: Arcadis
Report: Jeff Bowsteel
465 New Karner Rd First floor
Albany NY 12205
Phone: 518-452-7826
Fax: 518-452-7086
Email: JBowsteel@Arcadis-US.com

Company: Arcadis
Invoice: SAME
Phone:
Fax:
Email:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Comments	Vacuum Start/Stop
AMB-121809	12/18/09	199	119	TO-15		-31/-8
PZ-21	↓	330	403	TO-15		-29/-5

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C0

Chain of Custody	Print Name	Signature	Date/Time	Courier:
Sampled by:	Daniel Zuch		12/18/09	1500
Relinquished by:	Daniel Zuch			
Received at Lab by:	Jeff Soyka		12-18-09 1530	

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